

SYDNEY WESTERN CITY PLANNING PANEL

COUNCIL ASSESSMENT REPORT

Panel Reference	PPSSWC-37
DA Number	DA-639/2019
LGA	Liverpool City Council
Proposed Development	<p>Construction of an 11 storey residential flat building containing 52 apartments comprising of a mix of 1br and 2br units above 1 level of basement parking and the removal of all vegetation on the site and associated landscaping and civil works. All units will be used for the purpose of affordable housing,</p> <p>The application is lodged pursuant to the State Environmental Planning Policy (Affordable Rental Housing) 2009.</p>
Street Address	<p>Lots 22 & 23 of DP 35110</p> <p>4-6 Bigge Street, Warwick Farm</p>
Applicant/Owner	Hutchinson Builders on behalf of Land and Housing Corporation/NSW Land and Housing Corporation
Date of DA Lodgement	04 October 2019
Number of Submissions	Nil submissions
Recommendation	Approval, subject to conditions
Regional Development Criteria (Schedule 7 of the SEPP (State and Regional Development) 2011	The proposal is for an affordable housing development (a 'community facility') and has a capital investment value of over \$5 million, pursuant to Clause 5 of Schedule 7. It is also carried out in behalf of Land and Housing Corporation (a crown agency), pursuant to Clause 4 of Schedule 7.
List of all Relevant s4.15(1)(a) matters	<ul style="list-style-type: none"> • <i>List all of the relevant environmental planning instruments: Section 4.15(1)(a)(i)</i> <ul style="list-style-type: none"> ○ State Environmental Planning Policy (Affordable Rental Housing) 2009. ○ State Environmental Planning Policy No.65 – Design Quality of Residential Apartment Development. ○ State Environmental Planning Policy No.55 – Remediation of Land. ○ State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004. ○ Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment. ○ Liverpool Local Environmental Plan 2008. • <i>List any proposed instrument that is or has been the subject of public consultation under the Act and that has been notified to the consent authority: Section 4.15(1)(a)(ii)</i> <ul style="list-style-type: none"> ○ Nil • <i>List any relevant development control plan: Section 4.15(1)(a)(iii)</i> <ul style="list-style-type: none"> ○ Liverpool Development Control Plan 2008. <p style="text-align: center;">- Part 1 – General Controls for all Development.</p>

	<p>- Part 4 – Development in the Liverpool City Centre.</p> <ul style="list-style-type: none"> List any relevant planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4: Section 4.15(1)(a)(iia) <ul style="list-style-type: none"> No planning agreement relates to the site or proposed development. List any relevant regulations: 4.15(1)(a)(iv) <ul style="list-style-type: none"> Consideration of the provisions of the National Construction Code of Australia.
List all documents submitted with this report for the Panel's consideration	<ol style="list-style-type: none"> Architectural plans, demolition plan & landscape plans Survey plan and Stormwater Concept Plans Recommended conditions of consent Statement of environmental effects Clause 4.6 variation written justification to height SEPP 65 Design Verification Statement Acoustic Assessment Report Arborist Report Access Report Traffic Report Geotechnical Assessment report Waste management plan Contamination report Detailed Site Investigation BASIX certificate and house energy rating DEP comments SWCPP – Record of Briefing
Clause 4.6 requests	The applicant has provided an assessment under Clause 4.6 to vary the maximum height limit under Clause 4.3 of LLEP 2008.
Summary of key submissions	No submissions received
Report prepared by	Development Assessment
Report date	25 June 2020

Summary of s4.15 matters

Have all recommendations in relation to relevant s4.15 matters been summarised in the Executive Summary of the assessment report? **Yes**

Legislative clauses requiring consent authority satisfaction

Have relevant clauses in all applicable environmental planning instruments where the consent authority must be satisfied about a particular matter been listed, and relevant recommendations summarized, in the Executive Summary of the assessment report?
e.g. Clause 7 of SEPP 55 - Remediation of Land, Clause 4.6(4) of the relevant LEP **Yes**

Clause 4.6 Exceptions to development standards

If a written request for a contravention to a development standard (clause 4.6 of the LEP) has been received, has it been attached to the assessment report? **Yes**

Special Infrastructure Contributions

Does the DA require Special Infrastructure Contributions conditions (S7.11EF)? **No**
Note: Certain DAs in the Western Sydney Growth Areas Special Contributions Area may require specific Special Infrastructure Contributions (SIC) conditions

Conditions

Have draft conditions been provided to the applicant for comment? **Yes**

Note: in order to reduce delays in determinations, the Panel prefer that draft conditions, notwithstanding Council's recommendation, be provided to the applicant to enable any comments to be considered as part of the assessment report

1. EXECUTIVE SUMMARY

1.1 Reasons for the report

The Sydney Western City Planning Panel is the determining authority as the development is for affordable housing by a crown agency (NSW Land and Housing Corporation) with Capital Investment Value over \$5 million, pursuant to Clause 4 and 5(b) of Schedule 7 of the State Environmental Planning Policy (State and Regional Development) 2011.

1.2 The proposal

Construction of a 11 storey residential flat building containing 52 apartments comprising of a mix of 1 bedroom and 2 bedroom units above 1 level of basement parking and the removal of all vegetation on the site and associated landscaping and civil works. All units will be used for the purpose of affordable housing,

The application is lodged pursuant to the State Environmental Planning Policy (Affordable Rental Housing) 2009.

1.3 The site

The subject site is identified as Lots 22 & 23 of DP 35110 being No. 4-6 Bigge Street, Warwick Farm. The site is an amalgamation of the two lots with a total combined land area of 1,757m². It has a frontage of 35.14m to Bigge Street on the west, a rear lot dimension of 34.14 to the east and length of 51.525m and 51.46 to the north and south boundaries, respectively.

The site is relatively flat with a crossfall of 2.16% from its highest point at the southeast corner (19.86m AHD) to northwest corner (18.52m AHD) adjoining Bigge St. There are 14 small to medium sized trees located within the site, 1 tree on the road reserve and a large tree close to the rear property boundary which overhangs into the rear yard of the site.

1.4 The issues

The design and planning issues includes breach of the maximum building height, overshadowing of adjoining neighbour to the south and heat gain on the western façade. These issues have been resolved by the applicant through the submission of a Clause 4.6 written variation request to vary Clause 4.3 – height of buildings development standard, detailed solar study that demonstrates overshadowing to the adjoining neighbour to the south is minimal and the façade treatment to provide to shading to the west oriented windows from Levels 5 upwards.

The issues that emerged from the referrals include waste management and stormwater concept design. Both have either been resolved or conditions imposed to be supported.

1.5 Exhibition of the proposal

The development application was advertised for 14 days between 27 of November 2019 to 11 December 2019 in accordance with Liverpool Development Control Plan 2008 (LDCP 2008). No submissions were received during the notification period.

1.6 Conclusion

The application has been assessed pursuant to the provisions of the Environmental Planning and Assessment Act 1979. Based on the assessment of the application and the additional information and amendments made by the applicant, it is recommended that the DA be approved, subject to the recommended conditions of consent

2. SITE DESCRIPTION AND LOCALITY

2.1 The site

The subject site is identified as Lots 22 & 23 of DP 35110 being Nos. 4-6 Bigge Street, Warwick Farm. An aerial image of the subject site is provided below.



Figure 1 – Aerial photo of the site (Source: *Nearmap*)

The site is an amalgamation of two lots with a total combined land area of 1,757m². It has a frontage of 35.14m to Bigge Street on the west, a rear lot dimension of 34.14 to the east and length of 51.525m and 51.46 to the north and south boundaries, respectively.

The site is relatively flat with a crossfall of 2.16% from its highest point at the southeast corner (19.86m AHD) to northwest corner (18.52m AHD) adjoining Bigge Street. There are 14 small to medium sized trees located within the site, 1 tree on the road reserve and a large tree close to the rear property boundary overhangs into the rear yard of the site.



Figure 2 – Street views of the site from Bigge Street. (Source: *Nearmap*)

2.2 The locality

The locality within the immediate vicinity of the subject site consists of a number of high-rise apartment buildings mostly built in the last 6 years. The adjoining properties to north, south and east are six-storey residential flat buildings (RFB). Diagonally across Bigge Street to the northwest is another RFB of 16 storey height.

The site is located approximately 650m southwest of Warwick Farm Railway Station and 1km north of Liverpool Train Station and Bus interchange. Hume Highway and New Bridge Road are 50m and 1.2km from the site, respectively.

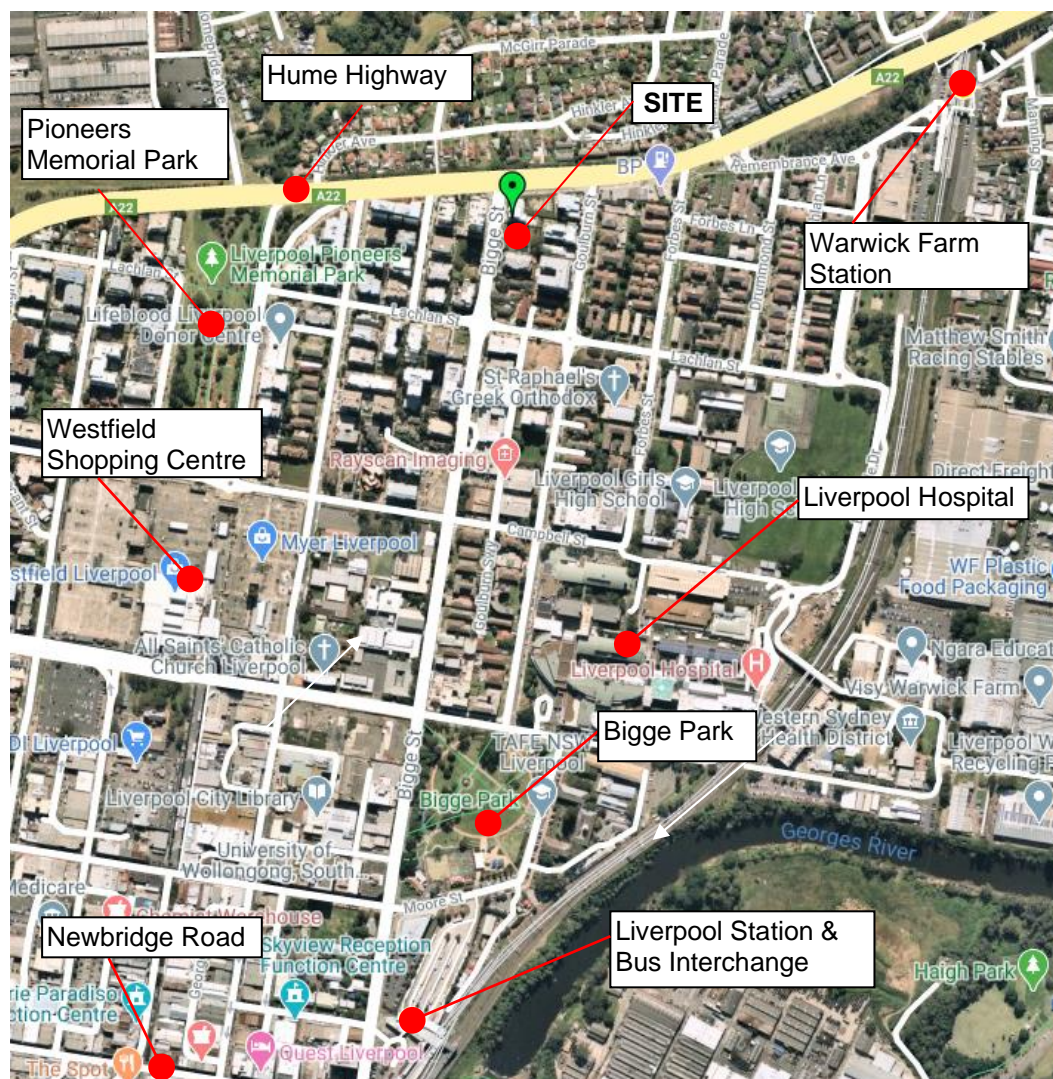


Figure 3: Locality Map (Source: Nearmap)

2.3 Site affectations

The preliminary site investigation report submitted with the application recommended a detailed site investigation (DSI) to be conducted having identified traces of contamination in their investigations. A DSI was undertaken and the consultant concluded that the site does not present a risk of harm to human health and environment and is considered suitable for the proposed residential development.

3. BACKGROUND

Prior to the current development application, there were 2 previous withdrawn lodgements and a pre-lodgement meeting conducted on the site. These are summarised as follows:

- In August 2011, a development application (DA-150/2012) was lodged with Council on behalf of Land and Housing Corporation (LAHC), for a residential flat building comprising of 37 residential units, basement car parking and associated landscaping. However, the following year, in September 2012, the application was withdrawn.
- In May 2015, a development application (DA-378/2015) was lodged with Council on behalf of LAHC for the construction of a 9-storey residential flat building comprising of 47 residential units and basement car parking. This DA was withdrawn in May 2016.

- On 27 March 2019, a pre-DA (PL-15/2019) meeting was conducted between Council officers and the current applicant together with their design team. The Council advice noted a number of issues to be addressed in the preparation of the development application.
- On 04 October 2019, the development application DA-639/2019 was lodged.
- On 21 October 2019, a stop the clock (STC) was issued to the applicant requesting for the following additional information to be provided;
 - Consolidation plan of the two existing lots
 - Tenancy Management Plan
 - Stage 2 – Detailed Site Investigation (DSI) and subsequent Remedial Action Plan (RAP) if required by the DSI.
- On 07 November 2019, the STC was lifted as outstanding items on contamination and tenancy management were being prepared.
- On 13 February 2020 a DEP meeting was conducted for the DA.
- On 23 March 2020 a SWCPP briefing meeting was held for the DA.

3.1. Design Excellence Panel

A DEP meeting was conducted on 13 February 2020 after the development application was lodged. The following table provides the meeting comments and response to the comments.

DA meeting with Design Excellence Panel	
DEP Comments	Response
Context	
<ul style="list-style-type: none"> • <i>The panel supports the definition of the 4-storey 'podium' portion of the building which aligns with the podium/roof levels of the neighbouring buildings. This will define the street edge and help the building sit well within its context.</i> • <i>So long as a high build quality is achieved, the proposal will make a positive contribution to the streetscape, particularly through the proposed landscape buffer zone and new tree canopy.</i> • <i>The panel supports the incorporation of the extended solid balconies, with the horizontal precast spandrel finish that is both attractive and practical. These, and the general quality of materials and design (including the retention of the architect for the entire project – ie: until the OC is received) need to be preserved through the design development and any value-management process to maintain design excellence.</i> 	Noted
Built Form and Scale	

<ul style="list-style-type: none"> • <i>The panel is concerned that the massing of the building will create adverse impacts to the amenity of the existing neighbouring building (8 Bigge Street). Additional information is needed explaining how the proposal complies with ADG requirements for solar access to this building. Please provide solar access diagrams and 3D sun-eye diagrams, at hourly intervals from 8am to 4pm, for June 21st (Winter Solstice) September 21st (Equinox) and December 21st (Summer Solstice). A clear understanding of the plan (floor layout and in particular balconies and living areas) for 8 Bigge Street is required to assess the solar access impacts of the proposal. NB: Please include all relevant existing buildings in the solar access/shadow diagrams (e.g.: 1 Bigge Street, and the potential building envelope on the vacant lot to the north of the subject site - 22 Hume Highway, Warwick Farm).</i> • <i>The overall building form is well considered for the site, in particular its horizontality, change to the built form at the 4th storey, feathering of the building corners, articulation and modulation of the building façade.</i> • <i>The panel supports the greater setback proposed along the northern boundary of the site, as this will assist with providing increased solar access to the neighbouring apartments (8 Bigge Street).</i> • <i>The panel recommends including some landscape elements above the ground level, within the building, such as integrated planters, to soften the building's appearance. Consideration will need to be made to maintenance implications.</i> 	<ul style="list-style-type: none"> • The applicant conducted solar studies which indicate that the reduction of the solar access to the adjoining property is 25% or 4 Units that used to enjoy over 2 hours of solar access will have less. This is 5% more than what is prescribed in Objective 3B-2 of the ADG. <p>The applicant argues that No. 8 Bigge Street was built before the ADG and therefore was not designed to achieve contemporary standards of amenity. Every reasonable effort has been made to minimise the impact on 8 Bigge Street, however, factors beyond the control of the applicant such as the non-compliant building setbacks of 8 Bigge Street create an inequitable burden for the neighbouring landowner.</p> <p>The setbacks provided are considered to be adequate for the proposal.</p> <ul style="list-style-type: none"> • Landscaped and planted elements to the building façade would involve a new ongoing maintenance cost to the asset as well as safety concerns for the tenants. Additionally, the risk of water ingress and moisture concerns increases with such inclusion and do not align with the objective to deliver robust and low maintenance accommodation. <p><u>Comment:</u> It is considered that the impact on adjoining neighbour is minimal considering the high-density zoning and such impacts</p>
---	---

	are inevitable and if enforced strictly will result in significant compromise and unreasonable economic cost to the applicant.
Density	
<ul style="list-style-type: none"> <i>The panel acknowledges and supports that the maximum FSR for the site, as prescribed in the SEPP FSR has not been fully utilised due to site constraints and amenity considerations, noting for Design Excellence to be achieved good urban design, landscape and acceptable impacts on neighbouring buildings and the public domain need to be achieved in conjunction with a well-designed building.</i> 	Noted
Sustainability	
<ul style="list-style-type: none"> <i>The panel supports the proposed sustainability measures including the application of ESD principles, inclusion of ceiling fans within apartments, use of photovoltaic panels to provide energy to common area lighting, and inclusion of a rainwater tank, for irrigation of landscape areas.</i> <i>The heat load on the glazing along the western façade needs to be addressed. Provide shelter to western sun, from level 5 upwards along the western façade.</i> <i>Incorporate a battery option attached to the solar panels, that can also be deployed for internal lighting, that could also be used in the event of power blackouts</i> 	<p>As detailed on the Architectural Plans (West Elevation), additional projecting horizontal blades from Level 05 upwards protect the west facing windows from the afternoon sun. These measures combined with deep recessed balconies and vertical screening assist in managing the heat load.</p> <p>Providing a battery option would unfortunately increase the construction cost per dwelling and ongoing operational expenditure which would ultimately lead to a reduced number of dwellings being delivered by LAHC.</p> <p>Furthermore, LAHC is in favour of providing passive energy reduction methods over inclusion of energy storage battery technology which carries its own maintenance costs.</p> <p>Battery storage could be provided in the future as it becomes more cost effective.</p>
Landscape	
<ul style="list-style-type: none"> <i>Overall, the panel supports the landscape proposal for the site. Update landscape plans in accordance with the public domain treatments shown in the draft Liverpool City Centre Public Domain Master Plan available at:</i> 	Updated landscape plans incorporating the public domain treatments have been prepared and are provided at Appendix 1.

<p>https://listens.liverpool.nsw.gov.au/liverpool-city-centre-public-domain-master-plan</p> <ul style="list-style-type: none"> • <i>This includes specifications for street tree species, paving materials and types and streetscape infrastructure.</i> • <i>Provide sections (conceptual hand sketches should be sufficient) showing the building edges and landscape areas, to help understand how the linear/pockets of open space could work, particularly in terms of privacy to dwellings and usability for a range of activities dependent on location.</i> • <i>The panel supports the potential future adaptive reuse of the south-western ground floor apartment into a community room, with an adjacent flexible outdoor space. The panel acknowledges that there would be potential management issues to be resolved (e.g. security, dumping of waste in the room), and therefore the room may need to be locked and opened for supervised events, however it has potential to provide meaningful benefit to the residents.</i> • <i>Please consider planter boxes to apartment balconies to provide additional landscape amenity to the dwellings, softening the building's appearance and potentially providing some amelioration of sunlight, heat island effect and increasing effects of climate change.</i> 	<p>A series of sections are provided on the architectural drawings.</p> <p>The suggested measure of a community room would increase the construction cost per dwelling and ongoing operational expenditure which would ultimately lead to a reduced number of dwellings being delivered by LAHC.</p> <p>Landscaped and planted elements to the building façade would involve a new ongoing maintenance cost to the asset as well as safety concerns for the tenants. Additionally, the risk of water ingress and moisture concerns increases with such inclusion and do not align with the objective to deliver robust and low maintenance accommodation.</p>
<p>Amenity</p>	
<ul style="list-style-type: none"> • <i>It is noted the building is well planned with an open to outside/sky window access from lobbies on each level. This provides relief from the dark and enclosed feeling of corridors. Please consider extending the corridor window (at least) 1 metre further south on levels 1, 2 & 3 to provide more room at the window and free the space around the east apartment front door.</i> • <i>If possible, double glazing to glass throughout the building would be desirable and would provide significant thermal and noise reduction benefits.</i> • <i>The panel supports the location of services and utilities on-site, which will be easily accessible yet hidden.</i> 	<p>As shown on the revised architectural plans, the corridor window has been relocated 1300mm further south on levels 1, 2 & 3 to provide more room at the window and free the space around the east apartment front door. This results in a slight increase in GFA however the proposal is still compliant with the maximum permissible FSR.</p> <p>Please refer to the Acoustic Report prepared by Acoustic Logic which was submitted with the DA. Laminate glass is proposed in nominated locations</p>

<ul style="list-style-type: none"> <i>The panel supports the inclusion of a bike storage area within the basement carpark.</i> 	<p>to the northern and western facades. The use of acoustic seals around the full perimeter of operable frames is also proposed. Frames will be sealed into the building opening using a flexible sealant to ensure noise reduction benefits.</p> <p>The development achieves a pass rating for the BASIX Thermal Comfort Project Score.</p>
Safety	
<ul style="list-style-type: none"> <i>The building entry is well defined and legible from the street. The panel supports locating of the mailboxes within the secured lobby area.</i> <i>The low walls and palisade fencing proposed for the ground floor terraces will provide a good level of permeability and balance between privacy and visibility to the street.</i> <i>The panel supports the proposed location for waste collection, in terms of access and safety for pedestrians and motorists.</i> 	<p>Noted</p>
Housing Diversity + Social Interaction	
<ul style="list-style-type: none"> <i>The panel acknowledges and supports this proposal for social & affordable housing by a Community Housing provider, which is much needed for all communities in all parts of Sydney.</i> <i>The panel acknowledges the limited apartment mix (1 and 2 bedroom apartments) due to the oversupply of 3 and 4 bedroom apartments in the Liverpool Council LGA. Please provide evidence of this oversupply to support the apartment mix for this application.</i> 	<p>There is high demand for social housing and a long waitlist of applicants seeking accommodation. The provision of 1 and 2-bedroom units is in direct response to the demographics represented in the demand data.</p>
Aesthetics	

<ul style="list-style-type: none"> • <i>This is a Design Excellence panel and high quality design solutions are expected in all aspects of a building's design to achieve endorsement from the panel for Design Excellence. The retention of skilled architects and landscape architects, and associated consultant team for this project is noted; retention of the Design and Consultant team until the Occupation Certificate (including the retention of the architect & landscape architect during construction for design advice and detail resolution) is also required for Design Excellence to be achieved in the final built outcome.</i> • <i>The panel supports the overall aesthetics of the proposed building, including the selection of materials and finishes. These are to be retained in the final built outcome and not substituted for at any stage through the project without suitable consultation with council and/or the panel to approve significant changes.</i> • <i>The panel supports the provision made for air conditioning to be retrofitted within the building at a later date if required/wanted. The discreet location for the air conditioning units will reduce visual impact on the public domain.</i> 	<p>Noted</p>
<p>Outcome</p>	
<p><i>The panel has determined the outcome of the DEP review and has provided final direction to the applicant as follows:</i></p> <p><i>Overall, the panel supports the proposal and feels that it is well resolved and could be a positive contribution to the quality of the streetscape along Bigge Street. The Panel's main concern is around solar access to the existing neighbouring property to the south (8 Bigge Street), as a result of this development. Consequently, the majority of comments are focused around this issue.</i></p> <p><i>The proposal is supported by the DEP if the recommendations contained in this report are adhered to. Please respond to recommendations made by the panel for final review and assessment by Council staff. The panel can make further recommendations via desktop review at the request of Council's assessments team if necessary.</i></p>	

It is considered that the applicant has adequately addressed the matters raised by the DEP in its meeting dated 13 February 2020. In that regard, the proposed development is considered to exhibit design excellence.

3.2. Sydney Western City Planning Panel (SWCPP) Briefing

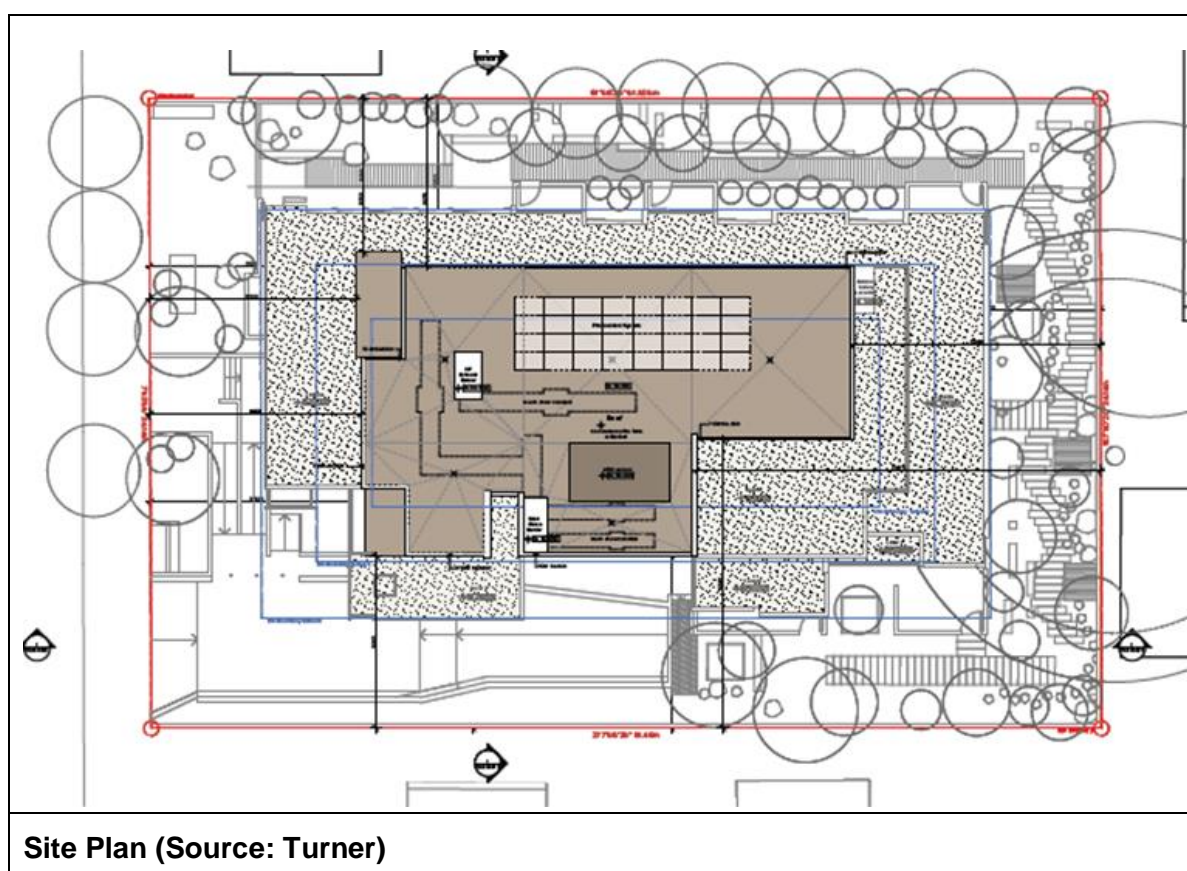
A SWCPP briefing was conducted on 23 March 2020. Key issues discussed at the meeting include the following:

Sydney Western City Planning Panel (SWCPP) Briefing				
Comments		Response		
<ul style="list-style-type: none"> The panel noted the generally positive report from the Design Excellence Panel (DEP), but with reservations in relation to solar access to the neighbouring buildings. In particular the panel highlighted for consideration the balconies containing the principal private open space located on the northern façade of the building to the immediate south. 		<p>The applicant conducted solar studies specifically on the impact of the proposed development on No.8 Bigge Street. The result of the solar study is summarised as follows:</p>		
		Development Scenario	Units with No Direct solar	Units with Less than 2 hrs
		Existing	6	4
		W/ proposal	6	8
		<p>Objective 3B-2 of the Apartment Design Guide: Overshadowing of neighbouring properties is minimised during mid-winter.</p> <p><i>“Where an adjoining property does not currently receive the required hours of solar access, the proposed building ensures solar access to neighbouring properties is not reduced by more than 20%.”</i></p> <p>There is a reduction of 4 Units that used to enjoy over 2 hours of solar access (25% change).</p> <p>The setbacks provided are considered to be adequate for the proposal.</p>		
<ul style="list-style-type: none"> The panel observed that the basement carpark will extend into the area of the canopy of the lemon scented gum tree to the rear, and noted that expert advice had been supplied by the applicant on that subject. Council's tree officer should advise whether she or he agrees with that report. 		<p>The applicant has provided an Arborist Report prepared by Redgum Horticultural which has specifically recommended the following:</p> <p><i>“The alignment of the basement will be a minor encroachment estimated at 9.5% to this specimen.</i></p> <p><i>The section of the basement within the TPZ of this specimen is to be constructed using tree sensitive excavation and construction techniques such as a vertical cut with shotcrete and contiguous pilings to reduce any impact on its stability.</i></p> <p><i>Selective pruning of this specimen may be required to clear access over the proposed development with works to be undertaken by a qualified arborist.”</i></p> <p>Furthermore, the “TPZ requires a 9.6m setback from the centre of the trunk, the setback for the proposed basement adjacent to this specimen is estimated at 6.7m from COT, which is an encroachment by the proposed development.”</p>		
<ul style="list-style-type: none"> The panel considered the height non-compliance but noted that it was largely restricted to the roof overrun, 		Noted		

<p><i>and did not appear to be of concern to the DEP.</i></p>	
<ul style="list-style-type: none"> <i>The issue of parking was raised, but the staff advised that the parking was compliant with the ARH SEPP rates.</i> 	<p>The Affordable Housing SEPP requires a car parking provision of 24 parking spaces which is provided by the proposed development.</p>

4. DETAILS OF THE PROPOSAL

Development consent is sought for the removal of all vegetation, construction of a residential flat building comprising eleven (11) storeys and fifty-two (52) affordable housing dwellings on one (1) basement parking level comprising twenty-four (24) car park spaces. The proposal is depicted in the site plan, front elevation and perspective views below:





Western Elevation (Source: Turner)



Perspective (Source: Turner)

Details of the proposal are provided as follows:

Building Form and Design

1. The proposed 11 storey residential flat building is comprised of 5 types of typical floor plan layouts defined by varying 1 and 2 bedroom unit combination on each floor level. These are summarised on the table below:

Typical Floor Layout	No of Levels	1 br Unit	2br Unit	Total Units per level
Ground Level	1	4	2	6
Levels 1 & 2	2	6	2	8
Level 3	1	5	2	7
Levels 4 & 5	2	1	3	4
Levels 6-10	5	1	2	3

The Ground Floor Level comprise 6 residential units and incorporate service functions that include street level pedestrian access to vertical circulation systems comprising of lift lobbies, lifts and fire stairs. A disabled persons ramp and the electricity substation flank each side of the main entry to the building. The vehicular ramp to the basement is located to the southwest corner of the site and adjoins the property boundary and the waste service rooms and loading areas.

Levels 1 & 2 consists of 8 RFB units per floor with a greater proportion of 2 bedroom units. Level 3 has a total of 7 RFB units with a larger proportion of 1 bedroom unit. The total number of units per floor diminish on Levels 4 to 5 and then again in Levels 6-10 which contains only 4 and 3 units per floor, respectively.

Communal Open Space (COS) and Landscaping

2. The COS is co-located with the landscaping on the ground level and wraps around the periphery of the building mainly along the north, east and part of the south setback areas with varying widths from 4.5m to 6m wide. Along the path of travel are a variety of landscape character spaces to cater for different groups of residents to enjoy. Opportunities for drying are also provided.

Planting incorporates a mix of canopy trees, shrubs and hedges and accent plants of native and exotic variety. Landscaping is also provided within the front setback of the site including fencing, paving and street trees. The existing large Lemon scented Gum on the neighbouring property to the east will be retained and provides additional character to the COS and landscaped area.

In total 12% deep soil landscaping and 29% communal open space are located on the ground floor level.

Access and Parking

3. The pedestrian access to the development is located at the mid portion of the site via a walkway from the Bigge Street footpath. The main entry is through a flight of stairs and a disabled ramp that leads to the lift lobby which continues to the rear entry into the COS.

The proposal includes construction of a driveway to the basement level with direct access from Bigge Street at the southern side of the site. The basement incorporates the following:

- 24 residential parking spaces (18 standard + 6 adaptable);
- 2 motorcycle spaces;
- 35 residential storage cages;
- 17 bicycle storage cages

Materials and finishes

4. The selection of building finishes and materials were considered to reduce maintenance and increase durability. These includes precast concrete skin with profiled textured finish, balconies with both solid and translucent glass, rendered concrete walls, painted steel fencing and the like.

Site Servicing Facilities

5. The development proposes to drain the site to the street via an On-Site Detention (OSD) basin located at the basement to the front of the site.
6. A garbage storage room is proposed in the ground floor level beside the basement ramp. Transfer of bins for collection by the waste collector on the allocated area within the site will be the responsibility of the appointed representative of the community housing provider.

5. STATUTORY CONSIDERATIONS

5.1. Relevant matters for consideration

The following Environmental Planning Instruments, Development Control Plans and Codes or Policies are relevant to this application:

Environmental Planning Instruments (EPI's)

- State Environmental Planning Policy (Affordable Rental Housing) 2009.
- State Environmental Planning Policy No.65 – Design Quality of Residential Flat Development.
- State Environmental Planning Policy No.55 – Remediation of Land.
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004.
- Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment;
- Liverpool Local Environmental Plan 2008.

Draft Environmental Planning Instruments

- No draft Environmental Planning Instruments apply to the site.

Other Plans and Policies

- Apartment Design Guide;

Development Control Plans

- Liverpool Development Control Plan 2008
 - Part 1 – General controls for all development
 - Part 4 – Development in Liverpool City Centre

Contributions Plans

- Liverpool Contributions Plan 2018 applies to the subject development

5.2. Zoning

The site is located in Zone R4 High Density Residential pursuant to LLEP 2008 as depicted in Figure 4 below.

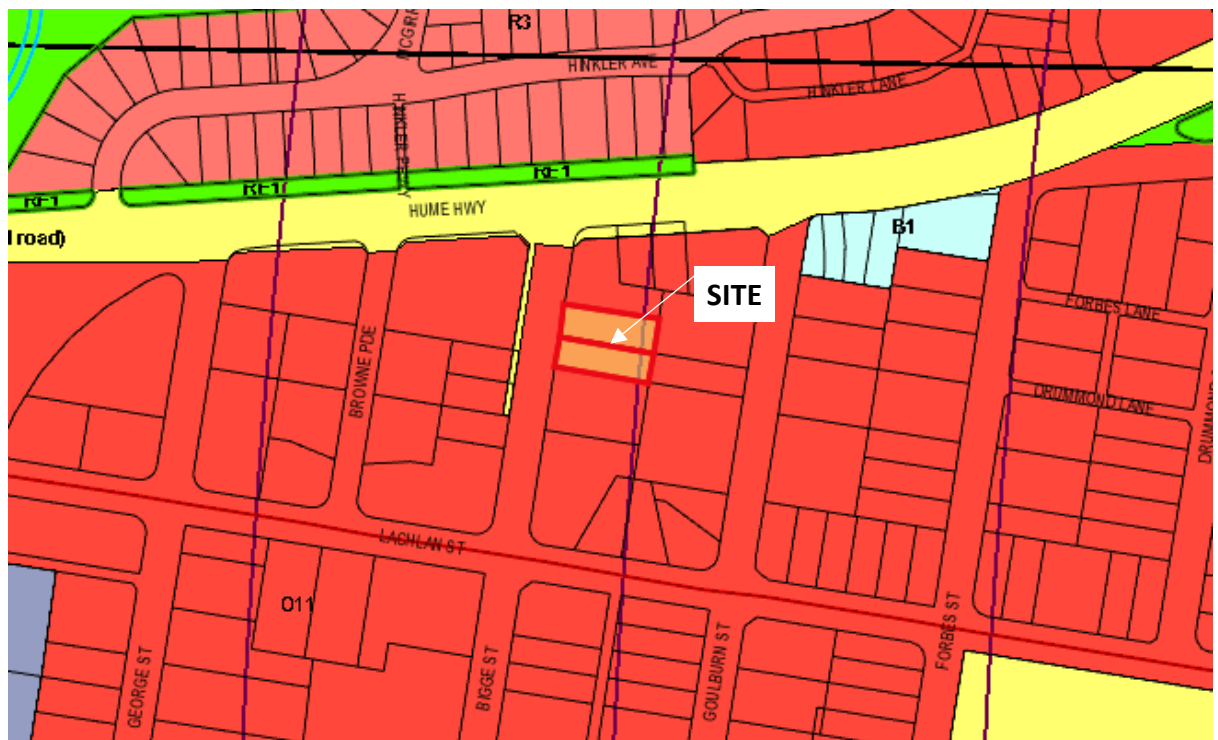


Figure 4 Extract of LLEP 2008 zoning map

5.3. Permissibility

The proposed development would be defined as a “*residential flat building*”, which is a permissible use with consent within the R4 High Density Residential Zone.

6. ASSESSMENT

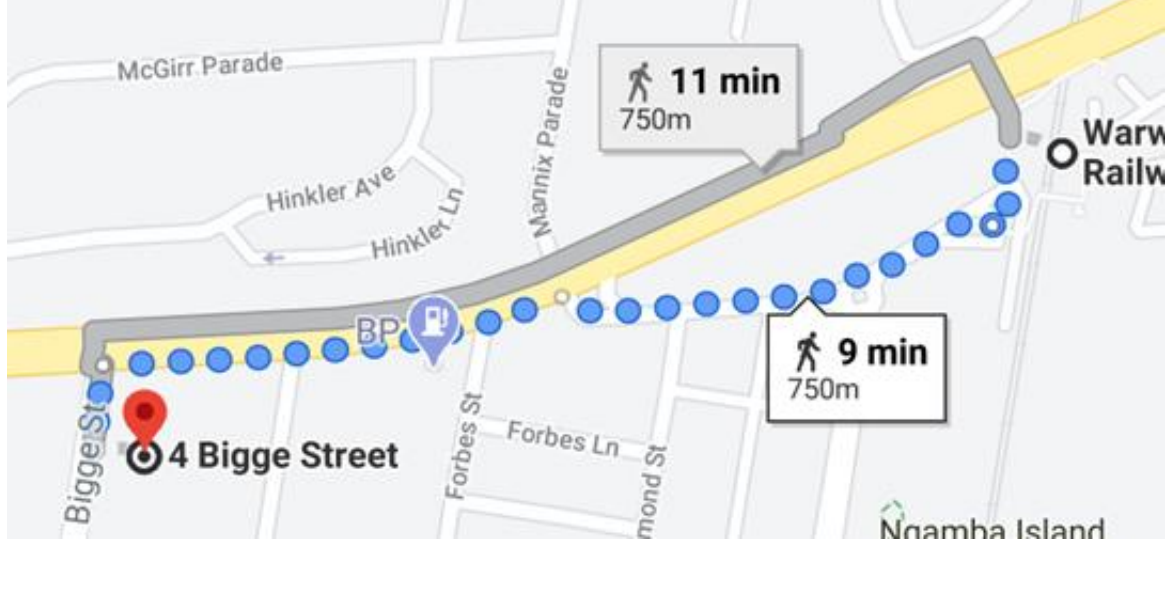
The development application has been assessed in line with the relevant matters of consideration prescribed by Section 4.15 of the *Environmental Planning and Assessment Act 1979* and the *Environmental Planning and Assessment Regulation 2000* as follows:

6.1 Section 4.15(1)(a)(1) – Any Environmental Planning Instrument

(a) State Environmental Planning Policy (Affordable Rental Housing) 2009

The DA has been lodged pursuant to the SEPP (Affordable Rental Housing) 2009. An assessment against the relevant provisions is provided in the table below.

Requirement	Provided	Complies
Part 2 New Affordable Rental Housing, Division 1 In Fill Affordable Housing		
Clause 10 Development to which Division Applies		
<p>(1) <i>This Division applies to development for the purposes of dual occupancies, multi dwelling housing or residential flat buildings if:</i></p> <p>(a) <i>the development concerned is permitted with consent under another environmental planning instrument, and</i></p> <p>(b) <i>the development is on land that does not contain a heritage item that is identified in an environmental planning instrument, or an interim heritage order or on the State Heritage Register under the Heritage Act 1977.</i></p>	<p>a) The site is zoned R4 High Density Residential and an RFB is a development that is permitted with consent under the LLEP 2008.</p> <p>(b) The site does not contain a heritage item, or an interim heritage order or on the State Heritage Register under the Heritage Act 1977.</p>	Yes
<p>(2) <i>Despite subclause (1), this Division does not apply to development on land in the Sydney region unless all or part of the development is within an accessible area.</i></p> <p><i>accessible area means land that is within—</i></p> <p>(a) <i>800 metres walking distance of a public entrance to a railway station or a wharf from which a Sydney Ferries ferry service operates, or</i></p> <p>(3) N/A</p>	<p>The site is 750m walking distance from Warwick Farm Train Station as shown in the image below</p>	Yes

Requirement	Provided	Complies
		
Clause 13 Floor Space ratio		
<p>(1) <i>This clause applies to development to which this Division applies if the percentage of the gross floor area of the development that is to be used for the purposes of affordable housing is at least 20 per cent.</i></p>	<p>It is proposed that 100% of the gross floor area (GFA) of the development will be utilised for affordable housing.</p>	<p>Yes</p>
<p>(2) <i>The maximum floor space ratio for the development to which this clause applies is the existing maximum floor space ratio for any form of residential accommodation permitted on the land on which the development is to occur, plus:</i></p> <p style="padding-left: 20px;">(a) <i>if the existing maximum floor space ratio is 2.5:1 or less:</i></p> <p style="padding-left: 40px;">(i) <i>0.5:1—if the percentage of the gross floor area of the development that is used for affordable housing is 50 per cent or higher, or.</i></p>	<p>A bonus FSR of 0.5 is applicable as 100% of the development is being used for affordable housing.</p> <p>Maximum permissible FSR under LLEP 2008 is 2:1 plus additional of 0.5 bonus under the SEPP ARH = 2.5:1</p> <p>Proposed FSR = 2.22:1</p>	<p>Yes</p>
Clause 14 Standards that cannot be used to refuse consent		
<p>(1) <i>Site and solar access requirements</i></p> <p><i>A consent authority must not refuse consent to development to which this Division applies on any of the following grounds:</i></p> <p>(a) <i>(repealed)</i></p> <p>(b) <i>Site Area</i></p>	<p>The site has an area of 1,757m².</p>	<p>Yes</p>

Requirement	Provided	Complies
<i>if the site area on which it is proposed to carry out the development is at least 450 square metres,</i>		
<p><i>(c) landscaped area: if:</i></p> <p><i>(i) in the case of a development application made by a social housing provider—a minimum 35m² of landscaped area per dwelling is provided, or</i></p> <p><i>(ii) in any other case—a minimum of 30% of the area of the site is to be landscaped,</i></p>	<p>The development contains 52 units, which equates to a requirement of 1,820m² of landscaped area.</p> <p>In this instance, compliance with the standard is considered to be unreasonable, given that the required area is greater than the site area itself of 1,757m². On the other hand, the relevant landscape requirement is contained in the ADG and LDGP, which stipulates a minimum of 25% of the site area.</p> <p>The proposal provides for 29% of the subject site as landscaped area. This amount of landscape area is considered acceptable.</p>	Considered acceptable
<p><i>(d) Deep Soil Zones</i></p> <p><i>In relation to that part of the site area that is not built on, paved or otherwise sealed:</i></p> <p><i>(i) there is soil of a sufficient depth to support the growth of trees and shrubs on an area of not less than 15% of the site area (the deep soil zone), and</i></p> <p><i>(ii) each area forming part of the deep soil zone has a minimum dimension of 3m, and</i></p> <p><i>(iii) if practicable, at least two-thirds of the deep soil zone is located at the rear of the site area,</i></p>	<p>Based on a total site area of 1,757m², a minimum deep soil zone of 263.55m² (15%) is required.</p> <p>The proposed deep soil area is only 12%. However, the proposal has been designed to comply with the provisions of the ADG which requires a deep soil area of 7% of the site area. The provisions in the ADG is considered to be acceptable in this instance.</p>	Considered acceptable
<p><i>(e) solar access: if living rooms and private open spaces for a minimum of 70% of the dwellings of the development receive a minimum of 3 hours direct sunlight between 9am and 3pm in mid-winter,</i></p>	<p>The proposal has been designed to comply with the provisions of the ADG which stipulates that the living room and private open space of 70% of units of the development achieve a minimum of 2 hours of solar access. The solar access provisions in the ADG are considered to be acceptable in this instance.</p>	Considered acceptable

Requirement	Provided	Complies
<p>(2) <i>General</i> <i>A consent authority must not refuse consent to development to which this Division applies on any of the following grounds:</i></p>		
<p>(a) <i>parking</i></p> <p>(i) <i>in the case of a development application made by a social housing provider for development on land in an accessible area—at least 0.4 parking spaces are provided for each dwelling containing 1 bedroom, at least 0.5 parking spaces are provided for each dwelling containing 2 bedrooms and at least 1 parking space is provided for each dwelling containing 3 or more bedrooms or..</i></p>	<p>The site is located in an 'accessible area' and following parking requirement applies:</p> <ul style="list-style-type: none"> - 29 x 1 bedroom requires 12 spaces; plus - 23 x 2 bedroom requires 12 spaces - Total = 24 parking spaces required. <p>Total requirement of 24 parking spaces is provided.</p>	Yes
<p>(b) <i>dwelling size</i> <i>if each dwelling has a gross floor area of at least:</i></p> <p>(i) <i>35m² in the case of a bedsitter or studio, or</i></p> <p>(ii) <i>50m² in the case of a dwelling having 1 bedroom, or</i></p> <p>(iii) <i>70m² in the case of a dwelling having 2 bedrooms, or</i></p> <p>(iv) <i>95m² in the case of a dwelling having 3 or more bedrooms.</i></p>	<p>There are only 1 & 2 bedroom units:</p> <ul style="list-style-type: none"> - All 1 bedroom units are greater than 50m² - All 2 bedroom units are greater than 70m² 	Yes
<p>(3) <i>A consent authority may consent to development to which this Division applies whether or not the development complies with the standards set out in subclause (1) or (2)</i></p>	<p>It is noted that the proposed development does not comply with the standards relating to:</p> <ul style="list-style-type: none"> - Clause 14(1)(c) in relation to landscaping; and - Clause 14(1)(d) in relation to deep soil; and - Clause 14(1)(e) in relation to solar access. <p>Subclause 3 allows for consent to be granted despite the non-compliance with the above standards relating to landscaping, deep soil and solar access.</p>	Yes
Clause 16 Continued Application of SEPP 65		

Requirement	Provided	Complies
<i>Nothing in this Policy affects the application of State Environmental Planning Policy No 65—Design Quality of Residential Flat Development to any development to which this Division applies.</i>	An assessment of SEPP 65 has been carried out and is found to be satisfactory. Further discussion is provided within this report.	Yes
Clause 16A Character of Local Area		
<i>A consent authority must not consent to development to which this Division applies unless it has taken into consideration whether the design of the development is compatible with the character of the local area.</i>	<p>The current character of the area is generally comprised of RFB development as per the objectives of the R4 – High Density Residential zone.</p> <p>As such, the proposed development is considered to be in accordance with the desired future character of the area.</p>	Yes
Clause 17 Must Be Used for Affordable Housing for 10 Years		
<p><i>(1) A consent authority must not consent to development to which this Division applies unless conditions are imposed by the consent authority to the effect that:</i></p> <p><i>(a) for 10 years from the date of the issue of the occupation certificate:</i></p> <p><i>(i) the dwellings proposed to be used for the purposes of affordable housing will be used for the purposes of affordable housing, and</i></p> <p><i>(ii) all accommodation that is used for affordable housing will be managed by a registered community housing provider, and</i></p> <p><i>(b) a restriction will be registered, before the date of the issue of the occupation certificate, against the title of the property on which development is to be carried out, in accordance with section 88E of the Conveyancing Act 1919, that will ensure that the requirements of paragraph (a) are met.</i></p> <p><i>(2) Subclause (1) does not apply to development on land owned by the Land and Housing Corporation or to a</i></p>	<p>LAHC is a government agency that provides social and affordable housing to people. LAHC will enter into an agreement with a not-for-profit organisation to manage the development as per Clause 17.</p>	Yes

Requirement	Provided	Complies
<i>development application made by, or on behalf of, a public authority.</i>		

(b) State Environmental Planning Policy No.65 – Design Quality of Residential Flat Development.

The DA was accompanied by a SEPP 65 Design Report. The statement provided a full assessment of the proposed development against the 9 key design quality principles of the SEPP and against the guidelines of the ADG.

The following table provides an assessment of the proposal in accordance with the 9 key design quality principles of SEPP 65, as follows:

SEPP 65 Design Quality Principles	
Design Quality Principle	Comment
Design Principle One – Context and Neighbourhood Character	
<p><i>Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions.</i></p> <p><i>Responding to context involves identifying the desirable elements of an area's existing or future character. Well designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neighbourhood.</i></p> <p><i>Consideration of local context is important for all sites, including sites in established areas, those undergoing change or identified for change.</i></p>	<p>The Architect's SEPP 65 statement in part states "<i>The immediate context is characterized by a number of multi-residential buildings at varying scales. The site is bound by Bigge Street to the west with a fifteen storey residential flat building located opposite the Site. Adjoining the Site, to the northern and southern boundaries, are two six-storey residential developments. The Site is not located within a heritage conservation area however Bigge Street is part of a street layout that represents the Hoddle Grid layout of the early town centre of Liverpool.</i></p> <p><i>The proposal is designed to fit in to this context. The building set back from the street boundary and 4-5 storey lower portion contribute to defining the street edge and reinforce the Hoddle Grid street pattern.</i></p> <p><i>The street address features a clearly defined building entry and a landscape strategy that offers a "green relief" zone through new street trees and high quality planting to the front set-back.</i></p> <p><i>The massing of the proposal was an important consideration to ensure that the development envelope minimized impact to neighbouring properties privacy or overshadowing.</i></p> <p><i>The character and materiality of the proposal is driven by simplicity, durability and low maintenance with materials designed to weather gracefully. Paint is minimised. The proposed pre-finished precast façade features a textured finish to the street elevation. The strong form and refined material palette offer a handsome architecture that the occupants and neighbourhood can be proud of."</i></p> <p>It is considered that the design of the proposed development responds and contributes to the future high-density urban character of the area. The scale of building and type of use are compatible with the envisaged proposed redevelopment</p>

SEPP 65 Design Quality Principles	
Design Quality Principle	Comment
	of the precinct and recognises and generally complies with the requirements of SEPP 65 and LLEP 2008.
Design Principle 2 – Built form and scale	
<p><i>Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings.</i></p> <p><i>Good design also achieves an appropriate built form for a site and the building's purpose in terms of building alignments, proportions, building type, articulation and the manipulation of building elements.</i></p> <p><i>Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.</i></p>	<p>The applicants architect considers that <i>"During the concept design phase a number of massing strategies were investigated. Starting with the movement of sun during mid-winter several massing strategies were tested against the various site controls, permissible FSR bonus (ARH SEPP) applicable to the site, the relationship to the public domain along Bigge Street, and the amenity of the internal spaces and apartments within the development.</i></p> <p><i>The selected solution was a massing that aimed to minimise adverse impacts to the amenity of adjoining properties while allowing high amenity to the apartments and communal open space within the development.</i></p> <p><i>The building setbacks at Level 04 and Level 06 (Storey 05 and 07) reduce the perceived scale and mass of the building. This enabled a defined base to the lower four storeys that defines the street edge and a slender upper portion that maximises solar access and natural ventilation to all units.</i></p> <p><i>On each face, balconies with translucent glass combined with the horizontal precast spandrel expression are used to break down the scale both in building length and height. Textured precast to the western street elevation brings a finer level of detail close to the street.</i></p> <p><i>All apartments have good outlook taking advantage of local vistas and landscaped communal areas.</i></p> <p><i>Active edges are provided by the building Lobby Entry at Bigge Street and access to the individual ground floor apartments from the Communal Open Space."</i></p> <p>It is considered that the proposed development achieves a scale, bulk and height appropriate to the existing and desired future character of the street block and surrounding buildings. It aligns with the FSR allowed under Clause 4.4 of the LLEP 2008.</p> <p>The proposed development achieves an appropriate built form for the site and is generally consistent with the applicable standards under the Apartment Design Guide (ADG). The proposed development has been reviewed by Council's Design Excellence Panel (DEP) and is considered to be satisfactory.</p>
Design Principle 3 – Density	
<p><i>Good design achieves a high level of amenity for residents and each apartment, resulting</i></p>	<p>The Architect's SEPP 65 Statement provides that <i>"The proposed development fits within the prescribed zoning; R4 High Density Residential under Liverpool LEP 2008 and</i></p>

SEPP 65 Design Quality Principles	
Design Quality Principle	Comment
<p><i>in a density appropriate to the site and its context.</i></p> <p><i>Appropriate densities are consistent with the area's existing or projected population. Appropriate densities can be sustained by existing or proposed infrastructure, public transport, access to jobs, community facilities and the environment.</i></p>	<p><i>proposes a residential density that supports the future intended population density for the area. The Statement of Environmental Effects references other planning considerations such as The Greater Sydney Region Plan (GSRP) March 2018 that recognises the demand for housing supply, choice, diversity and affordability in an area with access to jobs, services and public transport.</i></p> <p><i>The proposal is designed to provide 100% social housing all configured to meet the Livable Housing Australia guidelines with 12% configured for adaption.</i></p> <p><i>There are existing facilities in close proximity to support the proposed densities including Warwick Farm and Liverpool train stations, local neighbourhood shops and nearby land uses including Liverpool Hospital, Westfield Liverpool Shopping Centre and local schools such as Liverpool Girls High School and All Saints Catholic College. The proposed development</i></p> <ul style="list-style-type: none"> <i>- Reflects an FSR of 2.22:1. The site has an FSR of 2:1 under the Liverpool LEP 2008 however the development is eligible for a bonus 0.5:1 FSR given the proposal will provide more than 50% affordable housing.</i> <i>- Houses a total of 52 units with a mix of 54% one bedroom, 46% two bedroom apartments, allowing a mix of typologies and living patterns required by Land and Housing Corporation. All of the apartments are livable and feature both silver and gold level design elements as outlined in the Livable Housing Australia 2017 guideline.</i> <i>- Provides 27% of the site area as communal open space."</i> <p><i>The proposal contains a density and mix of units considered appropriate for the location within the City Centre. The proposed density is consistent with the LLEP 2008 and is considered to respond to the demands of the market, availability of infrastructure, public transport, community facilities and environmental quality.</i></p>
Design Principle 4 – Sustainability	
<p><i>Good design combines positive environmental, social and economic outcomes.</i></p> <p><i>Good sustainable design includes use of natural cross ventilation and sunlight for the amenity and liveability of residents and passive thermal design for ventilation, heating and cooling reducing reliance on technology and operation</i></p>	<p><i>The Architect's SEPP 65 Statement states "The development is designed to embrace ESD principles. The use of appropriate built form generates 67% of apartments in the first nine storeys naturally ventilated. The remaining apartments to the upper storeys are all naturally ventilated.</i></p> <p><i>The massing, internal layouts and orientation have been organised so as to provide good natural daylighting and solar access into the primary living spaces, external living areas and courtyard. The massing also allows a greater proportion of apartments to have a Northern aspect. Eastern</i></p>

SEPP 65 Design Quality Principles	
Design Quality Principle	Comment
costs. Other elements include recycling and reuse of materials and waste, use of sustainable materials and deep soil zones for groundwater recharge and vegetation.	<p>and Western aspects are then prioritised over south aspect apartments. Photovoltaics will be included on the roofs to provide energy to common area lighting.</p> <p>The development will include a tank for the retention of stormwater to be reused for irrigation.</p> <p>A BASIX report by Wood and Grieve Engineers is submitted with this development application outlining the thermal comfort, water and energy use strategy for the development.”</p> <p>The development provides opportunities in this regard, as reflected within the submitted BASIX Certificate. Energy efficiency is exemplified by the use of rooftop solar panels and water reuse for irrigation. These strategies are also aided by water/energy efficient fittings, appliances and lighting.</p>
Design Principle 5 – Landscape	
<p>Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity. A positive image and contextual fit of well designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood.</p> <p>Good landscape design enhances the development’s environmental performance by retaining positive natural features which contribute to the local context, co-ordinating water and soil management, solar access, micro-climate, tree canopy, habitat values and preserving green networks.</p> <p>Good landscape design optimises useability, privacy and opportunities for social interaction, equitable access, respect for neighbours’ amenity and provides for</p>	<p>The Architect’s SEPP 65 Statement provides that “An integrated approach has been adopted for the development where:</p> <ul style="list-style-type: none"> - A diversity of open spaces provide amenity and a hierarchy that responds to the need for a variety of different activities to occur within the site. - The street frontage will benefit the wider community; the footpath upgrade, four new street trees and a green relief zone of high quality planting and stone seats as a landscape feature are located adjacent to the Main Lobby Entry. - The Communal Open space celebrates the north eastern aspect and occupies the 6m wide deep soil zone at the eastern end of the site. A pathway connects the northern, eastern and southern gardens that are easily accessible from the Ground Floor Lobby. The northern garden offers tree groves and low wall seating for a series of quiet reflective spaces while the eastern garden offers informal play and deck seating that benefit from shade provided by the canopy of the existing Lemon Scented Gum to be retained. The south eastern garden will be a favourable respite especially in the warmer seasons. - Apartment access provides street activation and the communal landscaped spaces dedicated to each individual ground level apartment will provide a good amenity for residents; - Each apartment has a balcony complying with the minimum prescribed depth in the ADG and have been designed to encourage potted plants and maximise light

SEPP 65 Design Quality Principles	
Design Quality Principle	Comment
<i>practical establishment and long term management.</i>	<p><i>and views, whilst considering privacy and screening of clotheslines and balcony furniture.”</i></p> <p>It is considered that the proposal is well designed in terms of employing landscape elements into the building. The design provides deep soil space around the building for planting and landscaping.</p>
Design Principle 6 – Amenity	
<p><i>Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident well being.</i></p> <p><i>Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas and ease of access for all age groups and degrees of mobility.</i></p>	<p>The Architect's SEPP 65 Statement provides that</p> <p><i>“The building has been organised and arranged to maximise the potential amenity of the indoor and outdoor spaces.</i></p> <ul style="list-style-type: none"> - <i>The proposal complies with the amenity provisions of the ADG; solar access, natural cross ventilation, room size and apartment areas all meet or exceed SEPP65 minimums.</i> - <i>The use of appropriate built form generates 67% of apartments in the first nine storeys naturally ventilated. The remaining apartments to the upper storeys are all naturally ventilated.</i> - <i>Ceiling heights are designed to facilitate light and ventilation to the habitable areas and to allow for efficient mechanical extraction and services integration. 2.7m ceilings will be provided to living and bedrooms with minimal bulk heads below 2.7m. Some kitchens will be a minimum of 2.4m to all for the reticulation of hydraulic and mechanical exhaust ducts.</i> - <i>All units have primary living areas facing local district views or new communal open space.</i> - <i>Room sizes adopt the Livable and adaptable design standards while making the apartment look the same as regular apartments. This offers variety to potential residents, also allowing for age-in-place.</i> - <i>The privacy of the units has been maintained through appropriate setbacks, orientation, internal layouts and separation of balconies.”</i> <p>The design is considered to be satisfactory as it provides appropriate room sizes, access to natural light and ventilation, visual and acoustic privacy and provision of storage spaces, and indoor and outdoor spaces. In addition to the COS, private open spaces have been provided to all residential units in the form of balconies and ground level courtyards.</p> <p>A mixture of 1 and 2 bedroom units of varying configurations including adaptable units offer a variety of housing choice to the broader community.</p>

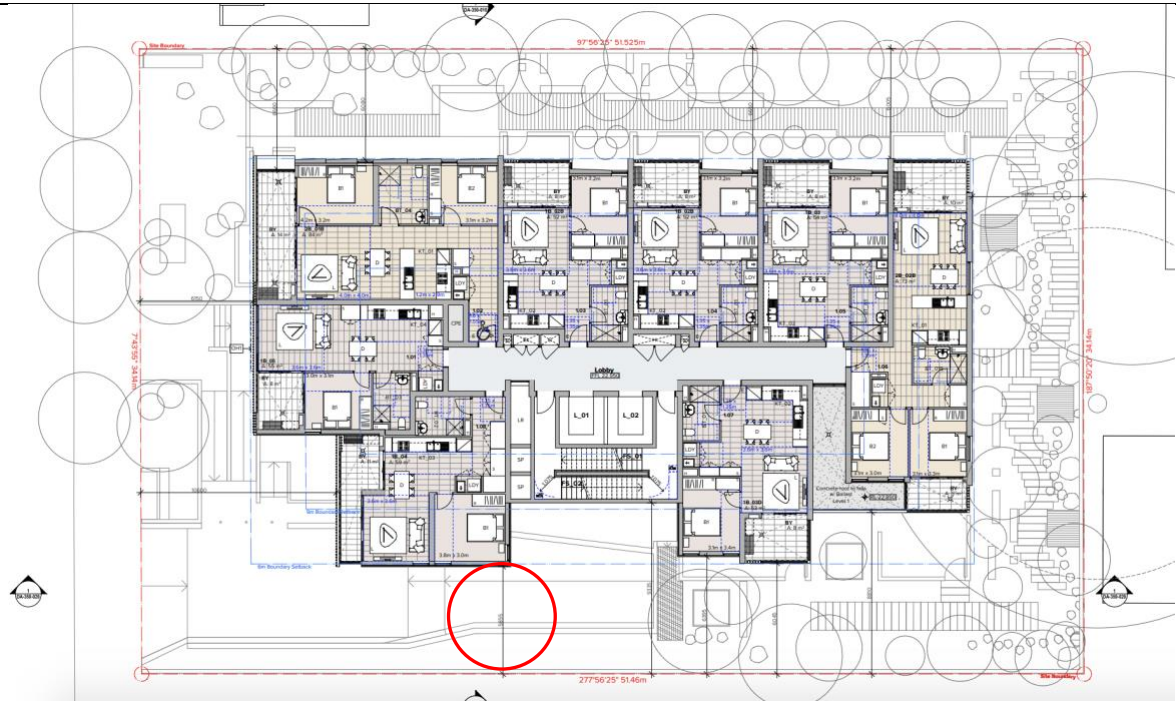
SEPP 65 Design Quality Principles	
Design Quality Principle	Comment
Design Principle 7 – Safety	
<p><i>Good design optimises safety and security within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety.</i></p> <p><i>A positive relationship between public and private spaces is achieved through clearly defined secure access points and well lit and visible areas that are easily maintained and appropriate to the location and purpose.</i></p>	<p>The Architect's SEPP 65 Statement provides the following:</p> <ul style="list-style-type: none"> <i>“ - Good passive surveillance of the street and communal areas is afforded by balconies and windows to the full building perimeter, thereby taking in all aspects. There are clear lines of site within and adjacent to the site.</i> <i>- Ground floor terraces feature low walls and palisade fencing providing appropriate separation and privacy for ground floor apartments.</i> <i>- The building entry is well defined and legible with mailboxes located inside the lobby in a secured area.</i> <i>- Appropriate lighting will be provided to all exterior areas, both public and communal, particularly around entry points. The entry lobby will be well-lit to accentuate the street address and continually illuminated after dark for added safety.</i> <i>- The building will utilise a security system at all entry points, and within the lifts. A single point of vehicular access is secured by an automatic roller door.</i> <p><i>Communal open space is well delineated from the public domain and is easily accessible and overlooked from apartments.”</i></p> <p>It is considered that the proposal maximises the potential for passive surveillance in the overall design of the building as outlined above by the Architect.</p>
Design Principle 8 – Housing Diversity and Social Interaction	
<p><i>Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets.</i></p> <p><i>Well designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix.</i></p> <p><i>Good design involves practical and flexible features, including different types of communal spaces for a broad range of people and providing opportunities for social interaction among residents.</i></p>	<p>The Architect's SEPP 65 Statement provides that <i>“The proposal is designed to provide 100% social housing in apartments with high amenity. All apartments are configured to meet the Liveable Housing Australia guidelines with 12% configured for adaption.</i></p> <p><i>One and two bedroom apartments are provided, following the social housing demands of the area. Ground floor and selected upper apartments have larger outdoor spaces suitable for different demographics.</i></p> <p><i>The outdoor spaces are designed to engender community spirit for residents within the development, by offering both public and private areas for congregation and activity.”</i></p> <p>It is considered that the proposal responds to the demographics, social needs and preferences of the social and affordable housing sector which is in great demand in the LGA.</p>

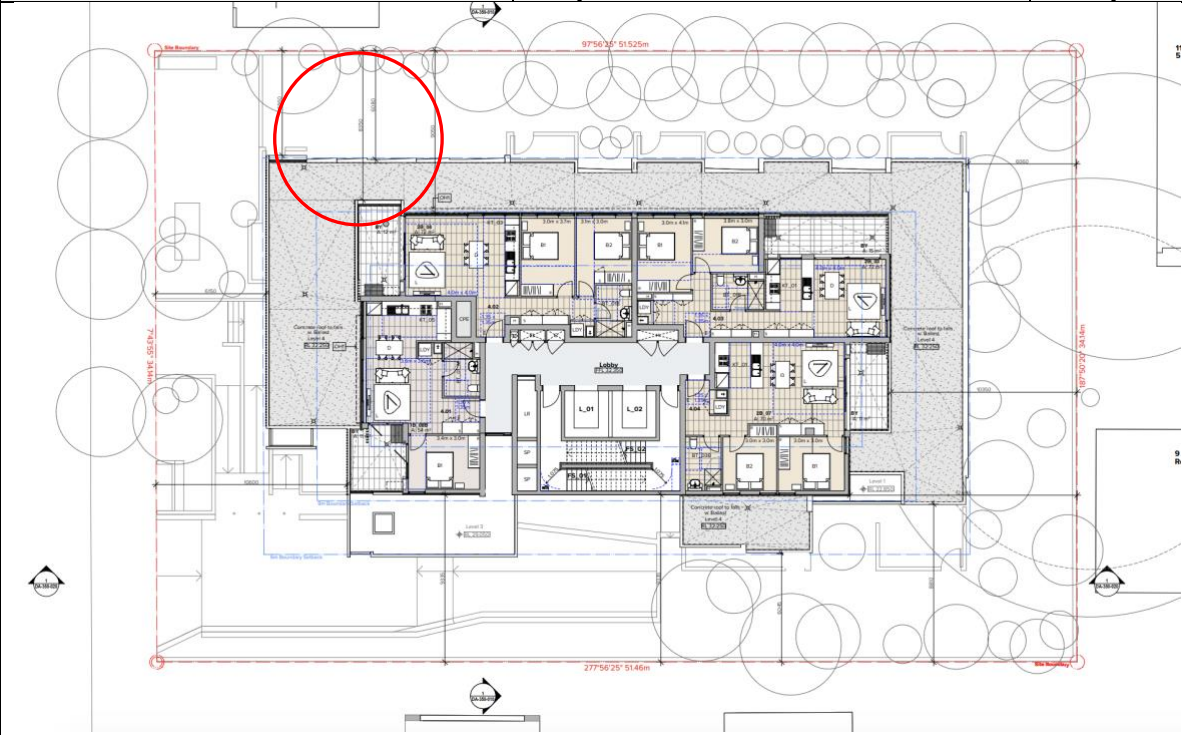
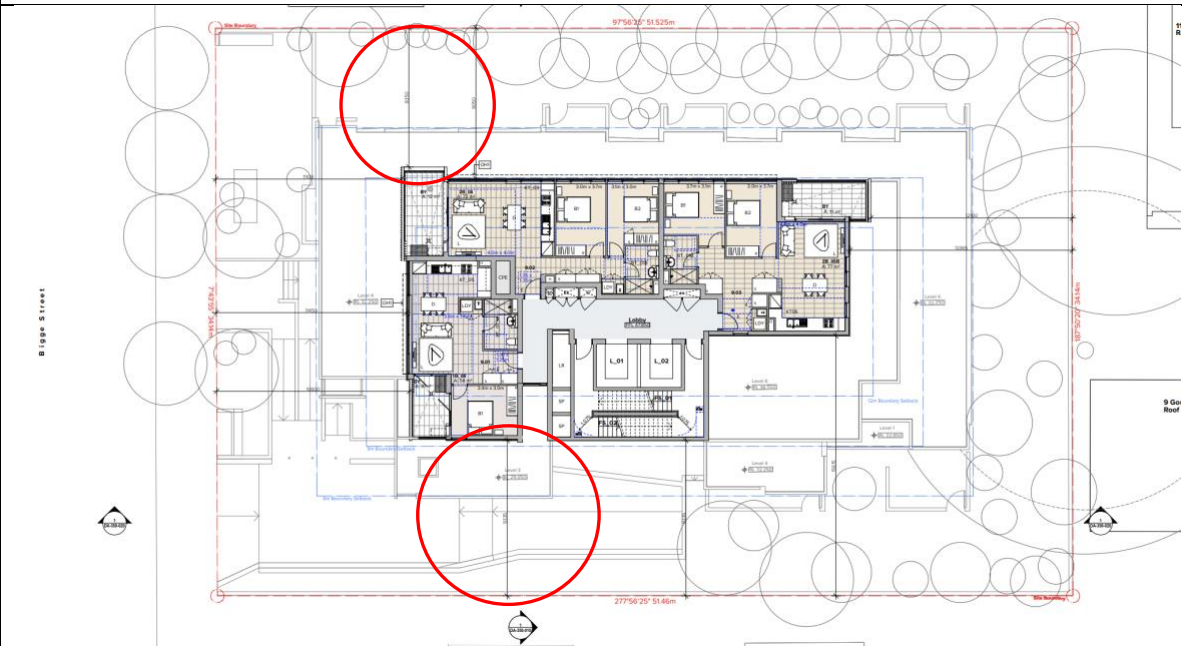
SEPP 65 Design Quality Principles	
Design Quality Principle	Comment
	The floor layout of the building encourages social interaction along the common corridors and lift lobbies as well as a COS on the Ground Floor Level.
Design Principle 9 – Aesthetics	
<p><i>Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design uses a variety of materials, colours and textures.</i></p> <p><i>The visual appearance of a well-designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.</i></p>	<p>The Architect's SEPP 65 Statement provides that <i>"The overall design concept has been to provide an approach that considers both the detail of the building at the scale of an individual person interacting with their immediate environment, as well as to consider the overall building form within the immediate context and how the material and treatment of the façade give character and definition in the context of Liverpool.</i></p> <ul style="list-style-type: none"> - <i>The street frontage and Lobby Entry is celebrated with good quality planting and an insitu concrete marker. A deliberate play on words through the use of supergraphic signage for "Bigge" wraps around all three corners creating visual intrigue for passers by in all directions.</i> - <i>The building setbacks at Level 04 and Level 06 (Storey 05 and 07) reduce the perceived scale and mass of the building. This enabled a defined base to the lower four storeys that defines the street edge and a slender upper portion that maximises solar access and natural ventilation to all units.</i> - <i>On each face, balconies with translucent glass combined with the horizontal precast spandrel expression are used to break down the scale both in building length and height. Textured precast to the western street elevation brings a finer level of detail close to the street.</i> - <i>The design has included consideration to external materials and finishes so that applied finishes are minimised to reduce maintenance. Interior finishes will also be selected for durability and ease of maintenance.</i> - <i>The proposed precast façade provides a durable, low maintenance building with materials designed to weather gracefully. The precast skin is given definition by select areas of precast with a profiled textured finish. A high degree of standardisation is proposed through panel size and the use of standard corrugated form-liners.</i> - <i>Balconies are both solid and translucent glass to allow privacy and screening of balcony furniture but still permitting openness and district views. These are designed to enable clothes lines and encourage potted plants and vegetation by residents.</i> - <i>Low rendered concrete walls painted in dark earthy tones are used for the garden walls to the ground floor terraces. These walls are fronted with painted steel fencing to bring</i>

SEPP 65 Design Quality Principles	
Design Quality Principle	Comment
	<p><i>a finer detail close to the street. The base is richer in its detailing, reflecting its proximity to pedestrians."</i></p> <p>The proposal is considered responsive to the environment in terms of composition and use of materials, responding to the streetscape within the vicinity of the site. The overall aesthetics is considered to be a suitable response to the existing character of the area.</p>

Further to the nine (9) design quality principles outlined in SEPP 65, Clause 30(2) of SEPP 65 also requires residential flat development to be designed in accordance with the Department of Planning Apartment Design Guide (ADG). The following table outlines compliance with the ADG, where numerical requirements ('controls') are specified.

Apartment Design Guide						
Provisions		Proposed		Complies		
2E Building Depth						
Suggested maximum of 12-18m		Ground to Level 3 = 25m Levels 4 to 10 = 16m		Yes, by merit		
<u>Discussion on Building Depth:</u> The aim of this clause is to ensure that the bulk of the development relates to the scale of the desired future context. The proposed depth is proportional to the length. The other aim is to support apartment layouts that meet the objectives, design criteria and design guidance within the ADG. As shown in the succeeding analysis, the proposed balconies are located to allow for increased solar penetration into most of the apartments.						
2F Building Separation						
Minimum separation distances for buildings are: Up to four storeys (approximately 12m): <ul style="list-style-type: none">• 6m between non-habitable rooms• 9m between habitable and non-habitable rooms• 12m between habitable rooms / balconies Five to eight storeys (approximately 25m): <ul style="list-style-type: none">• 9m between non-habitable rooms• 12m between habitable and non-habitable rooms• 18m between habitable rooms / balconies Nine storeys and above (over 25m):		Level	North (side)	South (side)	East (rear)	Yes, by merit
		Level 1 to Level 3	6m	5.8m*	6m	
		Level 4 to 9	8.35m*	9.3m	10.3	
		Level 9 & 10	8.35m*	9.3m*	12m	
		*Denotes non-compliance				

Apartment Design Guide		
Provisions	Proposed	Complies
<ul style="list-style-type: none"> • 12m between non-habitable rooms • 18m between habitable and non-habitable rooms • 24m between habitable rooms / balconies <p>Note: <i>It is generally applicable that half the building separation distance is provided, as adjoining development would provide the other half of the separation distance to ensure compliance</i></p>		
<p>Discussion on Building Separation:</p> <p>There are a number of non-compliances noted above that can be considered of minor nature on the south side from Level 1 to Level 3 (0.2m) and on the north side from Levels 4 to 8 (0.65m). Notwithstanding the above listed non-compliances, the development is considered to be acceptable with regards to visual privacy.</p> <p>More significant breaches occur on Levels 9 & 10 on the north and south sides (3.65m & 2.7m). The breaches however do not constitute the entire length of the building but only in short spans no greater than 7 to 8m. For Levels 9 & 10, the adjoining buildings do not reach that level and residential amenity including visual and acoustic privacy, natural ventilation, sunlight and daylight access and outlook are not compromised.</p>		
		
Level 1 to Level 3 (Southwest corner)		

Apartment Design Guide		
Provisions	Proposed	Complies
		
Level 4 to Level 8 (Northwest corner)		
		
Level 9 & 10 (Southwest and Northwest)		
3A Site analysis		
<p><i>Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context</i></p>	<p>The proposed development is considered appropriate for its context.</p>	<p>Yes</p>

Apartment Design Guide		
Provisions	Proposed	Complies
3B Orientation		
<p><i>Building types and layouts respond to the streetscape and site while optimising solar access within the development</i></p> <p><i>Overshadowing of neighbouring properties is minimised during mid-winter</i></p>	<p>The proposal meets the objectives as demonstrated in the shadow diagram study conducted in response to the DEP comments on the overshadowing to adjoining property to the south.</p>	Yes
3C Public domain interface		
<p><i>Key components to consider include entries, private terraces or balconies, fences and walls, changes in level, services locations and planting.</i></p> <p><i>Design can influence safety and security, opportunities for social interaction and the identity of the development when viewed from the public domain</i></p>	<p>The proposal meets the objectives as the street frontage will benefit the wider community; the footpath upgrade, four new street trees and a green relief zone of high quality planting and stone seats as a landscape feature are located adjacent to the Main Lobby Entry. The design works with a limited frontage to minimise the prominence of services and service areas to accommodate vehicular access and waste collection.</p>	Yes
3D Communal and public open space		
<p><i>Communal open space has a minimum area equal to 25% of the site</i></p> <p><i>Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid-winter)</i></p> <p><i>Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting</i></p> <p><i>Communal open space is designed to maximise safety</i></p>	<p>The proposal provides 27% of site area for communal open space</p> <p>The proposal will achieve the percentage requirements for communal open spaces (COS) receiving a minimum 2 hours of mid-winter sun. A series of quiet reflective spaces are accommodated while the eastern garden offers informal play and deck seating</p> <p>Good passive surveillance of the communal open space is afforded by balconies and windows to the full building perimeter, thereby taking in all aspects. The communal open space is well delineated from the public domain and is easily accessible and overlooked from apartments.</p>	Yes

Apartment Design Guide															
Provisions		Proposed	Complies												
Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood															
3E Deep soil zones															
Deep soil zones are to meet the following minimum requirements: <table><tr><td>Site area</td><td>Minimum dimension</td><td>Deep soil Zone</td></tr><tr><td>Greater than 1,500m₂</td><td>6m</td><td>7%</td></tr></table> 7% of the site area is to be for Deep Soil zone.		Site area	Minimum dimension	Deep soil Zone	Greater than 1,500m ₂	6m	7%	- 19% of the site features deep soil planting. - 11% of the site features deep soil with a minimum dimension of 6m.	Yes						
Site area	Minimum dimension	Deep soil Zone													
Greater than 1,500m ₂	6m	7%													
3F Visual Privacy															
Minimum separation distances from buildings to the side and rear boundaries are as follows: <table><tr><td>Building Height</td><td>Habitable Rooms and Balconies</td><td>Non Habitable Rooms</td></tr><tr><td>Up to 12m (4 storeys)</td><td>6m</td><td>3m</td></tr><tr><td>12m to 25m (5-8 storeys)</td><td>6m</td><td>4.5m</td></tr><tr><td>Over 25m (9+ storeys)</td><td>12m</td><td>6m</td></tr></table>		Building Height	Habitable Rooms and Balconies	Non Habitable Rooms	Up to 12m (4 storeys)	6m	3m	12m to 25m (5-8 storeys)	6m	4.5m	Over 25m (9+ storeys)	12m	6m	The proposal generally meets the objectives as discussed in 2F Building Separation above.	Yes
Building Height	Habitable Rooms and Balconies	Non Habitable Rooms													
Up to 12m (4 storeys)	6m	3m													
12m to 25m (5-8 storeys)	6m	4.5m													
Over 25m (9+ storeys)	12m	6m													
3G Pedestrian Access and Entries															
Building entries and pedestrian access connects to and addresses the public domain.		The proposal meets the objectives. Access, entries and pathways are accessible and easy to identify.	Yes												
Objective 3G-2 Access, entries and pathways are accessible and easy to identify															

Apartment Design Guide		
Provisions	Proposed	Complies
<i>Large sites provide pedestrian links for access to streets and connection to destinations</i>		
3H Vehicle Access		
<i>Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes</i>	<p>The proposal meets the objectives. The car park entry point is located to allow the smooth ingress of traffic and to avoid conflicts with pedestrian routes.</p> <p>The servicing and car entry is combined due to the limited street frontage. Passing bays provided to avoid traffic clashes.</p> <p>Pedestrian and vehicle access points to and from the buildings are to be kept separate.</p>	Yes
3J Bicycle and Car Parking		
<p><i>For development in the following locations:</i></p> <ul style="list-style-type: none"> <i>- on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or</i> <i>- on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre</i> <p><i>The minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less. The car parking needs for a development must be provided off street.</i></p> 	<p>A total of 24 car spaces are provided off street, of which 6 are accessible.</p> <p>Bicycle and motorcycle parking are provided for alternate transport choice.</p> <p>Car park access is secured and car parking is in the basement and accessed off Bigge Street.</p> <p>The Entry to the basement is minimised in width and appearance where possible while complying the development standards.</p> <p>There is no on-grade car parking</p> <p>There is no above ground enclosed car parking.</p>	Yes
<i>Parking and facilities are provided for other modes of transport</i>		

Apartment Design Guide		
Provisions	Proposed	Complies
<i>Car park design and access is safe and secure</i>		
<i>Visual and environmental impacts of underground car parking are minimised</i>		
<i>Visual and environmental impacts of on-grade car parking are minimised</i>		
<i>Visual and environmental impacts of above ground enclosed car parking are minimise</i>		
4A Solar and Daylight Access		
<i>Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid-winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas</i>	The living spaces of 71% of apartments receive a minimum of 2 hours direct sunlight at mid-winter. The private open space of 79% of apartments receive a minimum of 2 hours direct sunlight at mid-winter.	Yes
<i>In all other areas, living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 3 hours direct sunlight between 9 am and 3 pm at mid-winter</i>		
<i>A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid-winter</i>		
4B Natural Ventilation		
<i>All habitable rooms are naturally ventilated to create healthy indoor living environments</i>	Windows and doors are provided to habitable rooms. 67% of apartments within the first nine storeys achieve the cross-ventilation. Cross-through apartments do not exceed 18m glass line to glass line.	Yes
<i>At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate</i>		

Apartment Design Guide		
Provisions	Proposed	Complies
<i>natural ventilation and cannot be fully enclosed</i>		
<i>Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line</i>		
<i>The layout and design of single aspect apartments maximises natural ventilation</i>		
4C Ceiling Heights		
<i>Measured from finished floor level to finished ceiling level, minimum ceiling heights are 2.7m for habitable rooms and 2.4m for non-habitable rooms.</i>	<p>A minimum floor-to-floor height of 3.1m is used to allow the ADG recommendation of 2.7m ceiling height to be achieved in living, dining and bedroom areas.</p> <p>Where required, ceilings in kitchen areas are proposed at a minimum of 2.4m high to allow the integration of services.</p> <p>As the kitchen is typically located at the rear of the living areas, the reduced ceiling height above the kitchen has a minimal effect on the access of daylight from the façade and natural ventilation.</p>	Yes
4D Apartment Size and Layout		

Apartment Design Guide												
Provisions	Proposed	Complies										
<p>1. Apartments are required to have the following minimum internal areas:</p> <table><tr><td>Apartment Type</td><td>Minimum Internal Area</td></tr><tr><td>Studio</td><td>35m²</td></tr><tr><td>1 bedroom</td><td>50m²</td></tr><tr><td>2 bedroom</td><td>70m²</td></tr><tr><td>3 bedroom</td><td>90m²</td></tr></table> <p>The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m² each.</p> <p>A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m² each</p>	Apartment Type	Minimum Internal Area	Studio	35m ²	1 bedroom	50m ²	2 bedroom	70m ²	3 bedroom	90m ²	<p>The proposal achieves the design criteria. Where the 1 bedroom units internal areas range between 53m² to 57m². Similarly, 2 bedroom units range between 70m² to 82m².</p>	Yes
Apartment Type	Minimum Internal Area											
Studio	35m ²											
1 bedroom	50m ²											
2 bedroom	70m ²											
3 bedroom	90m ²											
<p>2. Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms</p>	<p>Windows are visible and within 8m from the furthest point within habitable rooms.</p>											
<p>4D-2 Habitable room depths are limited to a maximum of 2.5 x the ceiling height (2.7m x 2.5 = 6.75m)</p> <p>Note : For single aspect open plans with combined living, dining and kitchen = 8m</p>	<p>Living areas and bedrooms are all located on the external face of the building. Maximum habitable room depths from windows is 8m.</p>	Yes										
<p>In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window</p>												
<p>4D-3 Master bedrooms have a minimum area of 10m² and other bedrooms 9m² (excluding wardrobe space)</p>	<p>Minimum areas and widths for habitable rooms are provided or exceeded.</p> <p>All bedrooms allow a minimum length of 1.5m for robes</p>											
<p>Bedrooms have a minimum dimension of 3m (excluding wardrobe space)</p>												

Apartment Design Guide																	
Provisions	Proposed	Complies															
<p><i>Living rooms or combined living/dining rooms have a minimum width of:</i></p> <ul style="list-style-type: none"> - 3.6m for studio and 1 bedroom apartments - 4m for 2 and 3 bedroom apartments 	<p>The main bedroom of an apartment is provided with a wardrobe of a minimum 1.8m in length.</p>																
4E Private Open Space and Balconies																	
<p><i>All apartments are required to have primary balconies as follows:</i></p> <table border="1"> <thead> <tr> <th>Dwelling Type</th><th>Minimum Area</th><th>Minimum Depth</th></tr> </thead> <tbody> <tr> <td>Studio</td><td>4m²</td><td>-</td></tr> <tr> <td>1 bedroom</td><td>8m²</td><td>2m</td></tr> <tr> <td>2 bedroom</td><td>10m²</td><td>2m</td></tr> <tr> <td>3 bedroom</td><td>12m²</td><td>2.4m</td></tr> </tbody> </table> <p><i>The minimum balcony depth to be counted as contributing to the balcony area is 1m</i></p> <p><i>For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of 15m² and a minimum depth of 3m</i></p>	Dwelling Type	Minimum Area	Minimum Depth	Studio	4m ²	-	1 bedroom	8m ²	2m	2 bedroom	10m ²	2m	3 bedroom	12m ²	2.4m	<p>Minimum areas and depths of balconies and private open space meet or exceed the minimum requirements of the ADG.</p> <p>Private open spaces and balconies predominantly face north, east or west</p> <p>Primary balconies open directly from Living spaces.</p> <p>Balconies are both solid and translucent glass to allow privacy and screening of balcony furniture but still permitting openness and district views. These are designed to enable clothes lines and encourage potted plants and vegetation by residents.</p> <p>Balconies allow passive surveillance of the street while maintaining visual privacy.</p>	Yes
Dwelling Type	Minimum Area	Minimum Depth															
Studio	4m ²	-															
1 bedroom	8m ²	2m															
2 bedroom	10m ²	2m															
3 bedroom	12m ²	2.4m															
4F Common Circulation and Spaces																	
<p><i>The maximum number of apartments off a circulation core on a single level is eight</i></p>	<p>2 lifts are provided to service 52 apartments.</p> <p>The proposal features one circulation core that services a maximum of 8 apartments per level.</p>	Yes															
<p><i>For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40</i></p>	<p>There are 2 lifts provided to service 52 units</p>																

Apartment Design Guide												
Provisions	Proposed	Complies										
<i>Common circulation spaces promote safety and provide social interaction between residents</i>	<p>Common circulation spaces are designed to provide safe, legible spaces to foster interaction and harmony between residents;</p> <p>The ground floor lobby entry is well defined and legible with mailboxes located inside the lobby in a secured area.</p> <p>Upper level circulation spaces (lift lobby and hallways) are provided with natural light and ventilation.</p> <p>Communal open space is easily accessible from the Ground Floor Lobby</p>	Yes										
4G Storage												
<p><i>In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:</i></p> <table><tr><td><i>Dwelling Type</i></td><td><i>Storage Size Volume</i></td></tr><tr><td><i>Studio</i></td><td><i>4m₃</i></td></tr><tr><td><i>1 bedroom</i></td><td><i>6m₃</i></td></tr><tr><td><i>2 bedroom</i></td><td><i>8m₃</i></td></tr><tr><td><i>3 bedroom</i></td><td><i>10m₃</i></td></tr></table> <p><i>At least 50% of the required storage is to be located within the apartment.</i></p>	<i>Dwelling Type</i>	<i>Storage Size Volume</i>	<i>Studio</i>	<i>4m₃</i>	<i>1 bedroom</i>	<i>6m₃</i>	<i>2 bedroom</i>	<i>8m₃</i>	<i>3 bedroom</i>	<i>10m₃</i>	<p>38% of apartments accommodate the entire storage volume within the unit. The remaining locate a minimum of 50% of the required storage within the apartment with the remainder located in secure and accessible locations within the basement.</p> <p>A variety of storage types will be provided, accessed off living rooms and circulation corridors within the apartments.</p> <p>Storage locations will be allocated within the basement level as part of the proposal</p>	Yes
<i>Dwelling Type</i>	<i>Storage Size Volume</i>											
<i>Studio</i>	<i>4m₃</i>											
<i>1 bedroom</i>	<i>6m₃</i>											
<i>2 bedroom</i>	<i>8m₃</i>											
<i>3 bedroom</i>	<i>10m₃</i>											
4H Acoustic Privacy												
Noise transfer is minimised through the siting of buildings and building layout	Adequate building separation is provided from neighbouring buildings/adjacent uses.	Yes										
Noise impacts are mitigated within apartments through layout and acoustic treatments	<p>– Walls, glazing, and roofs are designed to meet the requirements of the acoustic report for sound mitigation, particularly from the Hume Hwy.</p> <p>Noisy areas within the proposed development including building</p>											

Apartment Design Guide		
Provisions	Proposed	Complies
	<p>entries and corridors are generally located above each other and quieter areas above quieter areas;</p> <p>– Where possible, bedrooms of adjacent apartments will be located next to each other and likewise with living area.</p> <p>– Storage, circulation areas and non-habitable rooms will be located to buffer noise from living areas and common areas;</p> <p>– The party walls (walls shared with other apartments) are designed to meet the requirements of the acoustic report.</p>	
4K Apartment Mix		
<i>A range of apartment types and sizes is provided to cater for different household types now and into the future</i>	<p>A variety of apartment types are provided.</p> <p>Contains a total of 52 units with a mix of 54% one bedroom, 46% two bedroom apartments, allowing a mix of typologies and living patterns. All of the apartments are liveable and feature both silver and gold level design elements as outlined in the Liveable Housing Australia 2017 guideline.</p>	Yes
<i>The apartment mix is distributed to suitable locations within the building</i>		
4L Ground Floor Apartments		
<i>Street frontage activity is maximised where ground floor apartments are located.</i> <i>Direct street access should be provide to ground floor apartments.</i>	<p>The ground level is designed to provide activity and vibrancy through the building lobby and an integrated landscape concept for the public domain that includes new street trees and high-quality planting</p> <p>Provision of gates and fences will be designed to offer a surveillance of the public domain and privacy for residents through a balance of permeability and opacity.</p>	Yes
<i>Design of ground floor apartments delivers amenity and safety for residents</i>		

Apartment Design Guide		
Provisions	Proposed	Complies
4M Facades		
<i>Building facades provide visual interest along the street while respecting the character of the local area</i>	Shadow is created on the façade throughout the day by building articulation, texture of precast, recessed balconies and portions of projecting balconies. Residential apartments are clearly identifiable and distinguishable from the services.	Yes
<i>Building functions are expressed by the facade</i>		
4N Roof Design		
<i>Roof treatments are integrated into the building design and positively respond to the street</i>	Roof treatments are integrated with the building design and materials to compliment the architectural aesthetic.	Yes
<i>Opportunities to use roof space for residential accommodation and open space are maximised</i>		
<i>Roof design incorporates sustainability features</i>		
4O Landscape Design		
<i>Landscape design is viable and sustainable</i>	Building performance is enhanced by incorporating a diverse planting including appropriately planted shading trees and street trees to meet DCP requirements.	Yes
<i>Landscape design contributes to the streetscape and amenity</i>		
4P Planting on Structures		
<i>Appropriate soil profiles are provided</i>	Diverse planting that is low in maintenance and suited to the site are incorporated to enhance the performance of the landscaped areas.	Yes
<i>Plant growth is optimised with appropriate selection and maintenance</i>		
<i>Planting on structures contributes to the quality and amenity of communal and public open spaces</i>		
4Q Universal Design		

Apartment Design Guide		
Provisions	Proposed	Complies
<i>Universal design features are included in apartment design to promote flexible housing for all community members</i>	100% of the total apartments incorporate the Liveable Housing design.	Yes
<i>A variety of apartments with adaptable designs are provided</i>		
<i>Apartment layouts are flexible and accommodate a range of lifestyle needs</i>		
4T Awnings and Signage		
<i>Awnings are well located and complement and integrate with the building design</i>	Awnings are well located and complement and integrate with the building design.	Yes
<i>Signage responds to the context and desired streetscape character</i>		
4U Energy Efficiency		
<i>Development incorporates passive environmental design</i>	Natural light will be provided to all habitable rooms.	Yes
<i>Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer</i>	The massing, internal layouts and orientation have been organised so as to provide good natural daylighting and solar access into the primary living spaces, external living areas and courtyard.	
<i>Adequate natural ventilation minimises the need for mechanical ventilation</i>	The massing also allows a greater proportion of apartments to have a northern aspect. Eastern and Western aspects are then prioritised over south aspect apartments. Photovoltaics will be included on the roofs to provide energy to common area lighting.	
4V Water Management and Conservation		
<i>Potable water use is minimised</i>	The development will incorporate water efficient fittings, and rain-water re-use.	Yes

Apartment Design Guide		
Provisions	Proposed	Complies
	Plant selections are designed for the microclimate and are typically low-water use.	
<i>Urban stormwater is treated on site before being discharged to receiving waters</i>	WSUD principles are incorporated; on site detention tank is located underground.	
<i>Flood management systems are integrated into site design</i>	Not Applicable.	
4W Waste Management		
Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents	<p>A bulk-waste area for residents is provided at Ground Level.</p> <p>Garbage collection will be on site via the driveway access.</p>	Yes
Domestic waste is minimised by providing safe and convenient source separation and recycling		
	<p>Communal waste room is be provided at Ground Level for residents. This is located in a convenient accessible location adjacent to the Lift core.</p> <p>Waste and recycling storage areas will be well ventilated and have durable and washable finishes</p> <p>All dwellings will be designed to have sufficient internal space for the holding of waste and recycling as required under DCP.</p>	
4X Building Maintenance		
<i>Building design detail provides protection from weathering</i>	<p>Building materials are selected to weather gracefully. Painted and applied finishes are minimised.</p> <p>Suitable access for cleaning will be provided by appropriately controlled roof access.</p> <p>The majority of windows can be cleaned from inside or from balconies.</p> <p>The use of applied finishes is minimised.</p>	Yes
<i>Systems and access enable ease of maintenance</i>		
<i>Material selection reduces ongoing maintenance costs</i>		

Based on the above assessment, the proposed development satisfy the objectives of the ADG and the application is considered to be worthy of support.

(c) State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)

The objectives of SEPP 55 are:

- *To provide for a state wide planning approach to the remediation of contaminated land.*
- *To promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment.*

Pursuant to clause 7 the above SEPP, Council must consider:

- Whether the land is contaminated.
- If the land is contaminated, whether it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the proposed use.

A preliminary site investigation was conducted by STS Environmental and submitted with the application. The report recommended the following:

“STS consider that the site may be made suitable for the proposed development subject to further site investigations within areas of the site which have been proposed to be covered with vegetation. The investigation would aim at characterising potential PAHs contamination within these areas to allow appropriate assessment of associated human health risks to construction and maintenance workers”.

Subsequent to Council issuing a STC in relation to concerns raised by the above report for ‘further site investigation’, the applicant engaged Geotechnique Pty Ltd to conduct a Stage 2 Detailed Site Investigation. The report (Report No.14570) dated 25 November 2019 provided a summary of additional intrusive testing and concluded that:

“Based on the assessment, the site does not present risk of harm to human health and environment and in our opinion, the site is considered suitable for the purposed residential development “ furthermore, it qualifies that “ for any materials to be excavated and removed from the site, it is recommended that waste classification of the material in accordance with the “Waste Classification Guidelines Part 1: Classifying Waste (NSW EPA 2014), NSW EPA resource recovery exemptions and orders under the Protection of the Environment Operations (Waste) Regulation 2014, or NSW EPA Certificated: Virgin excavated natural material is undertaken prior to disposal at an appropriately licensed landfill or potential re-use at other sites.”

Based on the above, it is considered that the subject site is suitable for the proposed development. However, in the event of contamination, detailed assessment and remediation will be necessary. Conditions of consent will be imposed.

(d) State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004.

A BASIX certificate (No. 1006073M_03 dated 03 September 2019) and report has been submitted with the development application.

(e) Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment (deemed SEPP)

The Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment generally aims to maintain and improve the water quality and river flows of the Georges River and its tributaries. When a consent authority determines a development application planning principles are to be applied (Clause 7(2)).

Stormwater Concept Plans have been submitted with the DA that provide a scheme for capturing, detaining and treating stormwater flow and connecting to Council's system. The plans have been assessed by Council's Land Development Engineers and are considered satisfactory for the purpose of dealing with stormwater on site and protecting the quality of water discharging to the Georges River.

It is considered that the proposal satisfies the provisions of the GMREP No.2 subject to appropriate sedimentation and erosion controls being implemented during construction, the development will have minimal impact on the Georges River Catchment.

(f) Liverpool Local Environmental Plan 2008

i. Permissibility

The proposed development is defined as a 'Residential Flat Building', which is permissible within the R4 Zone.

ii. Objectives of the zone

The objectives of the R4 – High Density Residential zone are identified as follows:

- *To provide for the housing needs of the community within a high density residential environment.*
- *To provide a variety of housing types within a high density residential environment.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*
- *To provide for a high concentration of housing with good access to transport, services and facilities.*
- *To minimise the fragmentation of land that would prevent the achievement of high density residential development.*

The proposal satisfies the above objectives of the R4 zone as follows:

- It will provide for housing needs within a high density residential environment. It is noted that development in the immediate vicinity of the site consists of high density residential development;
- It will contain a number of different sized units and adaptable units thereby providing a variety of housing types within a high density residential environment;
- It will not hinder the opportunity for other land uses that provide facilities or services to meet the day to day needs of residents;
- The site is within close proximity to transport facilities which include Bus routes and 2 railway stations; and
- The proposal will provide high density residential development that will not result in the fragmentation of land that would otherwise hinder the opportunity for other high density residential development within the area.

iii. Principal Development Standards and Provisions

The LLEP 2008 contains a number of principal development standards which are relevant to the proposal. Assessment of the application against the relevant standards is provided below.

Clause	Provision	Comment	Complies
Clause 4.1 <i>Minimum Subdivision Lot Size</i>	<i>Minimum lot size of 1000m²</i>	The existing 2 lots will be amalgamated resulting in a total land area of 1,757m ² .	Yes
Clause 4.3 <i>Height of Buildings</i>	<i>Maximum height of 35m</i>	The current proposal seeks a maximum building height of 36.5m to the top of the lift overrun. The greatest variation is therefore equivalent to 1.5m or 4.2%.	No, See discussion below.
Clause 4.4 <i>Floor Space Ratio</i>	<i>The LEP requires a maximum FSR of 2:1 for the site. Additional bonus of 0.5 is provided under the SEPP ARH or a total of 2.5:1</i>	The proposed GFA = 3,908 m ² that translates to an FSR of 2.22:1	Yes
Clause 4.6 <i>Exceptions to development standards</i>	<i>Provisions relating to exceptions to development standards</i>	A written request to vary Clause 4.3 Height of Buildings has been submitted. Further discussion is provided below.	Yes
7.1 Objectives for Development in Liverpool City Centre	<p><i>Before granting consent for development on land in the Liverpool city centre, the consent authority must be satisfied that the proposed development is consistent with such of the following objectives for the redevelopment of the city centre as are relevant to that development.</i></p> <p><i>(a) to preserve the existing street layout and reinforce the street character through consistent building alignments,</i></p> <p><i>(b) to allow sunlight to reach buildings and areas of high pedestrian activity,</i></p>	<p>The proposed development will assist in preserving the existing street layout and will help reinforce the street character through the redevelopment of a current vacant block of land within the Liverpool city centre. The proposed residential flat building is of a high quality design and is consistent with the surrounding building typologies. The proposed development will assist to enhance the streetscape along Bigge Street.</p> <p>The design of the building, internal layouts and orientation have been purposefully designed to provide good natural daylighting and solar access into the primary living spaces, external living areas and courtyard. The massing enables a greater proportion of apartments to have a northern aspect. Eastern and western aspects are prioritised over south aspect apartments</p>	Yes

	<p>(c) to reduce the potential for pedestrian and traffic conflicts on the Hume Highway,</p> <p>(d) to improve the quality of public spaces in the city centre,</p> <p>(e) to reinforce Liverpool railway station and interchange as a major passenger transport facility, including by the visual enhancement of the surrounding environment and the development of a public plaza at the station entry,</p> <p>(f) to enhance the natural river foreshore and places of heritage significance,</p> <p>(g) to provide direct, convenient and safe pedestrian links between the city centre (west of the rail line) and the Georges River foreshore.</p>	It is considered that the proposal satisfies the objectives of clause 7.1.	
7.4 Building separation in Liverpool city centre	<p>(1) The objective of this clause is to ensure minimum sufficient separation of buildings for reasons of visual appearance, privacy and solar access.</p> <p>(2) Development consent must not be granted to development for the purposes of a building on land in Liverpool city centre unless the separation distance from neighbouring buildings</p>	The proposal complies with building separation in Clause 7.4.	Yes

	<p><i>and between separate towers, or other separate raised parts, of the same building is at least -</i></p> <p><i>(a) 9 metres for parts of buildings between 12 metres and 25 metres above ground level (finished) on land in Zone R4 High Density Residential, and</i></p> <p><i>(b) 12 metres for parts of buildings between 25 metres and 35 metres above ground level (finished) on land in Zone R4 High Density Residential,</i></p>		
Clause 7.5 Design Excellence in Liverpool City Centre	<p><i>(a) whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved,</i></p>	<p>The proposed development will exhibit a high standard of architectural design, materials and detailing appropriate to its location within Bigge Street. The overall design concept provides an approach that considers both the detail of the building at the scale of an individual person interacting with their immediate environment and provides consideration to the overall building form within the immediate context and how the material and treatment of the façade give character and definition in the context of Liverpool. A mix of high quality, durable materials, colours and textures have been chosen to respond to and enhance the existing and future local context of this part of the Liverpool City Centre.</p>	Yes
	<p><i>(b) whether the form and external appearance of the proposed development will improve the quality</i></p>	<p>The proposed development will facilitate the redevelopment of a currently vacant site and will greatly assist in enhancing and improving the site from the public</p>	Yes

	<i>and amenity of the public domain,</i>	domain. The public domain interface between the site and Bigge Street has been carefully considered and the proposed development ensures a seamless junction is provided from the public domain. It is considered that the proposal offers a high standard of architectural design that express each use housed within into the external façade.	
	<i>(c) whether the proposed development detrimentally impacts on view corridors,</i>	The proposed development will not detrimentally impact on significant view corridors or limit any views of existing development.	Yes
	<i>(e) any relevant requirements of applicable development control plans,</i>	A detailed assessment of compliance with the LDCP 2008 is undertaken further in this report. It is considered that the proposed development is consistent with the requirements of the LDCP 2008.	Yes
	<p>(f) how the proposed development addresses the following matters</p> <p>(i) the suitability of the site for development,</p> <p>(ii) existing and proposed uses and use mix,</p> <p>(iii) heritage issues and streetscape constraints,</p> <p>(iv) the location of any tower proposed, having regard to the need to achieve an acceptable relationship with other towers (existing or proposed) on the same site or on neighbouring sites in terms of separation, setbacks, amenity and urban form,</p>	<p>(i) The NSW Government and Liverpool City Council have implemented changes to the LLEP 2008 which will aim to revitalise the Liverpool City Centre. The proposed development will contribute to the delivery of the updated plans.</p> <p>(ii) The proposal is a residential development which reflects the predominant use of adjoining properties.</p> <p>(iii) The site is not listed as a heritage item in any statutory instrument and is not within any Heritage Conservation Area (HCA). However, it is in the vicinity of several listed heritage items, which will not be adversely impacted as a result of the proposal.</p> <p>(iv) The site has been designed in conjunction with future development of adjoining lots.</p> <p>(v) The proposed building has been designed to taper from a larger floor plate at the base levels</p>	Yes

	<p>(v) bulk, massing and modulation of buildings,</p> <p>(vi) street frontage heights,</p> <p>(vii) environmental impacts such as sustainable design, overshadowing, wind and reflectivity,</p> <p>(viii) the achievement of the principles of ecologically sustainable development,</p> <p>(ix) pedestrian, cycle, vehicular and service access, circulation and requirements,</p> <p>(x) the impact on, and any proposed improvements to, the public domain.</p>	<p>and getting smaller as it rises above.</p> <p>(vi) The LLEP 2008 does not set street height controls for the subject site.</p> <p>(vii) Specialists reports have been prepared that appropriately addresses the matters relating to sustainable design, overshadowing, wind and reflectivity. The outcome of each is that the proposed development is considered to be consistent with and able to achieve all relevant standards and requirements for development.</p> <p>(viii) The design makes efficient use of natural resources, energy and water throughout its full life cycle including construction methods. An energy efficient building response is developed through passive design and sun control elements on the façade design.</p> <p>(ix) A Traffic and Parking Assessment prepared by Varga Traffic Planning has been submitted and has been assessed against the various traffic, parking and access requirements for the site and proposed development. The report has found that the proposed development is compliant with Council's requirements.</p> <p>(x) Street lighting and tree planting been identified by Council to be undertaken along Bigge Street.</p>	
Clause 7.7 Acid Sulfate Soils	Ensure that development does not disturb, expose or drain acid sulfate soils and cause environmental damage	The subject site is affected by Class 5 - acid sulfate soils. The development is unlikely to be impacted by Acid Sulfate Soils.	Yes

7.14 Minimum Building Street Frontage	<p><i>Minimum building street frontage of 24m</i></p> <p><i>(2) Development consent must not be granted to development for the purposes of any of the following buildings, unless the site on which the buildings is to be erected has at least one street frontage to a public street (excluding service lanes) of at least 24 metres -</i></p> <p><i>(b) any building of more than 2 storeys on land in Zone R4 High Density Residential, B1 Neighbourhood Centre or B2 Local Centre, or</i></p> <p><i>(c) any residential flat building.</i></p>	The site has a total frontage of 34.14m to Bigge Street.	Yes
7.17 Airspace Operations	<i>The objectives of this clause is to protect airspace around airport.</i>	The site is located in the 100m AHD contour for the Bankstown Airport Obstacle Limitation. The proposed RFB is 55.770m AHD. This was validated by an email obtained by the applicant from Sydney Metro Airports.	Yes

Discussion on variation under Clause 4.6 of LLEP 2008 development standards

As identified in the compliance table above, the proposed building height does not comply with the provisions of the LLEP 2008 and is discussed as follows:

Variation to Clause 4.3 Height of Buildings

Clause 4.3(2) of the LLEP 2008 identifies a maximum height of 35m for the site. The majority of the proposed development complies with the exception of the lift overrun and some parts of the parapet. The current proposal seeks a maximum building height of 36.5m to the top of the lift overrun which represents a numerical variation of up to 1.5m or 4.2% to the maximum height limit.



Figure 2: East Elevation (Source: Turner Architects)

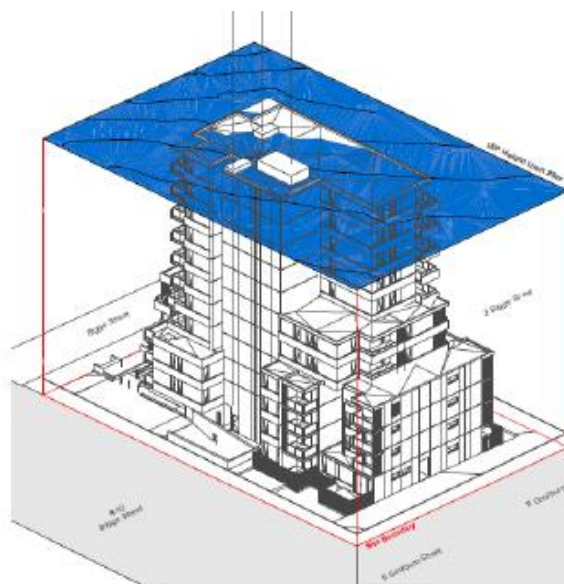


Figure 3: South Elevation (Source: Turner Architects)

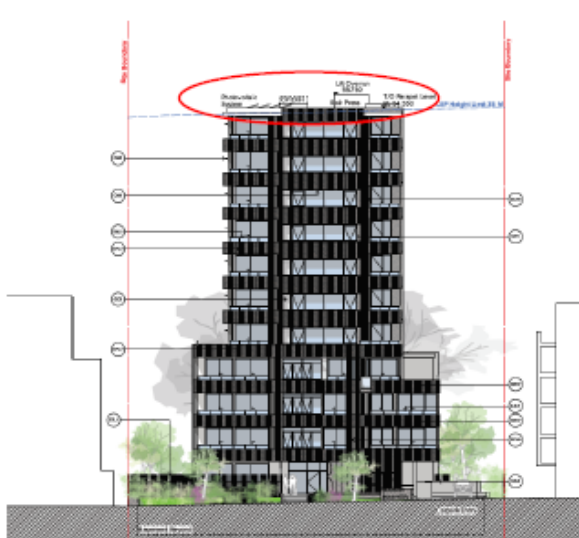


Figure 4: West Elevation (Source: Turner Architects)



Figure 5: North Elevation (Source: Turner Architects)

Figure 5: – Extract of the architectural plans showing the building elements which exceed the height limit.

Consequently, the applicant has provided an assessment under Clause 4.6 to vary the maximum height allowed on this proposal.

The submitted written request to vary Clause 4.3 - height of buildings has been assessed against the provisions of Clause 4.6; the objectives of the Clause being varied; and the objectives of the R4 zone. These are discussed below.

The objectives of Clause 4.6 Exceptions to development standards of the Liverpool Local Environmental Plan (LEP) 2008 are as follows:

(1) The objectives of this clause are as follows—

- (a) *to provide an appropriate degree of flexibility in applying certain development standards to particular development,*
 - (b) *to achieve better outcomes for and from development by allowing flexibility in particular circumstances.*
- (2) *Development consent may, subject to this clause, be granted for development even though the development would contravene a development standard imposed by this or any other environmental planning instrument. However, this clause does not apply to a development standard that is expressly excluded from the operation of this clause.*
- (3) *Development consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:*
- (a) *that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and*
 - (b) *that there are sufficient environmental planning grounds to justify contravening the development standard.*
- (4) *Development consent must not be granted for development that contravenes a development standard unless:*
- (a) *the consent authority is satisfied that:*
 - (i) *the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and*
 - (ii) *the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and*
- 1) Written request addressing why compliance with the development standard is unreasonable or unnecessary in the circumstances of the case and that there are sufficient planning grounds to justify the contravening of the development standard

The applicant has provided the following comments addressing why compliance with the development standard is unreasonable or unnecessary in this case, as summarised:

- *The proposal is consistent with the existing and desired future character of the immediate area and is not incongruous with the locality, with a number of multistorey buildings adjacent to the site.*
- *The breach of the standard does not result in an inconsistency with this objectives of the Clause 4.6 of the LLEP 2008. The building is centrally located on the site and the building is predominantly consistent with the required DCP setbacks for the site. The overall built form (including the height) of the proposal has been carefully designed, along with its bulk and scale to improve residential amenity and provide an attractive and carefully articulated building.*
- *The area of non-compliance will cause minimal overshadowing to adjoining properties, as confirmed in the shadow diagrams. Additional overshadowing as a result of the breach is limited to a very small extent of the road reserve along Bigge Street and the roof of 8-10 Bigge Street. The additional overshadowing caused by the breach is considered to be negligible.*

- *When viewed from the streetscape below and adjoining roads, the proposed building will read as a well defined and appropriately scaled residential building which is compatible with its locality and adjoining development.*
- *The building incorporates setbacks at levels four, five and seven which reduce the perceived size and bulk of the building.*

The locality of Warwick Farm and the nearby Liverpool City Centre includes a range of tall developments, with a 15-storey development located to the west of the site at 1 Bigge Street. As such, there is very little opportunity for the additional height to protrude above the established height or dominate the built form in the locality.

- *In this case, strict compliance with the height of buildings development standard of the LLEP 2008 is unnecessary and unreasonable.*

In response to the applicant's submission, Council accepts that strict compliance with the applicable height control is unreasonable and unnecessary having regard to the following:

- It is noted that the breach in height limit is associated with a portion of the parapet at the north-western corner of the building and the lift overruns. The parapet exceeds the height limit in this location given the topography of the site. It is considered that the height breach is minor as there is no blanket height breach and the elements that are higher than the permissible height includes minor portions of the parapet and lift overrun.
- In order to negate any breach in the maximum height limit, the applicant would need to significantly excavate the natural ground floor level at the front of the site to reduce the height of the ground floor level. It is considered that such a design is not ideal as excavation of the natural ground level would result in a development whereby the ground floor level is significantly lower than the street level, which is considered to detract from the streetscape. In the circumstances, it is considered that the height of the ground floor level is suitable for the purpose of achieving adequate stormwater drainage of the proposed development and so that the ground floor adequately addresses the streetscape.
- The plans show that the proposed development has a tapered built form and the bulk is confined to the centre of the site. Therefore, the development has been designed so as to reduce the bulk adjoining existing residential properties to the south, north and east. As a result, the development minimises any additional length in shadow cast to adjoining neighbours to the south. Shadow diagrams have been submitted which shows that the impacts of the proposal to the southern neighbour is minimal. Also, it can be seen from the diagram that exceedance of the height limit as a result of the lift overrun that does not result in additional shadow impacts.
- The development accommodates two lifts in close proximity. Both are located towards the central portion of the building. Considering this, the lift overrun is a breach of the height limit that is considered to be reasonable and compliance is not necessary in this instance.
- The subject site accommodates a 11 storey building which is an anticipated built form in a zone that permits a height of buildings of 35m. In order to achieve a compliant building height, it would be necessary to remove the eleventh storey of the building thereby reducing the dwelling yield of the development and possibly the amount of

affordable housing onsite; or retaining the development yield but not without substantial changes to the building design which may result in an inferior design outcome. In this case, it is considered that there is adequate environmental grounds to support a variation.

- The proposed non-compliant building height was reviewed by the DEP. The panel raised no objections with the additional height of the proposed development.
- Given the amalgamated site area, it is considered that the proposed development is of an appropriate bulk and scale.

2) Consistency with objectives of the development standard Clause 4.3 Height of Buildings

The objectives of Clause 4.3 and assessment are as follows:

- (a) to establish the maximum height limit in which buildings can be designed and floor space can be achieved*
- (b) to permit building heights that encourage high quality urban form,*
- (c) to ensure buildings and public areas continue to receive satisfactory exposure to the sky and sunlight,*
- (d) to nominate heights that will provide an appropriate transition in built form and land use intensity.*

Having regard to objective a, the breach of the standard does not result in an inconsistency with this objective. The proposed development achieves the maximum building height for its habitable storeys. There is no blanket height breach and the elements that are higher than the permissible height including rooftop structures such as the lift overrun.

The anticipated built form is consistent with the floorspace controls. The proposed development has a floor space ratio of 2.22:1, which is lower than the permissible floor space ratio of 2.5:1 for the site, in accordance with State Environmental Planning Policy (Affordable Rental Housing) 2009.

The proposal is consistent with the existing and desired future character of the immediate area and is not incongruous with the locality, with a number of multistorey residential flat buildings adjacent to the site.

Having regard to objective b, the breach of the standard does not result in an inconsistency with this objective. The overall built form (including the height) of the proposal has been carefully designed, along with its bulk and scale to improve residential amenity and provide an attractive and carefully articulated building. The articulation and quality of materials proposed in the built form will result in a modern and desirable development. The rooftop structures which marginally exceed the permissible height limit are undiscernible from the intervening streetscape and adjoining dwellings below.

Despite the minor variation, the proposed built form is appropriate to the site and is contextually in keeping with the scale of the future character of the area.

Having regard to objective c, the breach of the standard does not result in an inconsistency with this objective. The building is centrally located on the site and the building is predominantly consistent with the required DCP setbacks for the site. An area of communal open space for residents is integrated around the perimeter of the building to provide a buffer between the building and the boundary line. This allows for good building separation between adjoining properties, which in turn results in good amenity and solar access.

The area of non-compliance will cause minimal overshadowing to adjoining properties, as confirmed in the shadow diagrams provided. Additional overshadowing as a result of the

breach is limited to a very small extent of the road reserve along Bigge Street and the roof of 8-10 Bigge Street. The additional overshadowing caused by the breach is considered to be marginal.

Having regard to objective d, the breach of the standard does not result in an inconsistency with this objective. The rooftop structures which exceed the height standard are largely indiscernible from the intervening streetscape below and from adjoining dwellings.

When viewed from the streetscape below and adjoining roads, the proposed building will read as a well defined and appropriately scaled residential building which is compatible with its locality and adjoining development. The building incorporates setbacks at levels four, five and seven which reduce the perceived size and bulk of the building.

The locality of Warwick Farm and the nearby Liverpool City Centre includes a range of tall developments, with a 15-storey development located to the west of the site at 1 Bigge Street. As such, there is very little opportunity for the additional height to protrude above the established height or dominate the built form in the locality.

3) Consistency with objectives of the zone – R4 High Density Residential

The objectives of the R4 zone are as follows;

- *To provide for the housing needs of the community within a high density residential environment.*
- *To provide a variety of housing types within a high density residential environment.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*
- *To provide for a high concentration of housing with good access to transport, services and facilities.*
- *To minimise the fragmentation of land that would prevent the achievement of high density residential development.*

The proposal will provide for 52 new residential units which is reflective of the high density zone. It is acknowledged that there is a demand for more affordable housing within the Liverpool Local Government Area and the applicant responds to this need by offering 100% of the dwellings as affordable housing for a period of at least 10 years, as per the requirement under the SEPP (Affordable Rental Housing) 2009. The proposed development is consistent with other high density residential development in the LGA.

4) Consistency with Clause 4.6 objectives

- a) *to provide an appropriate degree of flexibility in applying certain development standards to particular development, and*
- b) *to achieve better outcomes for and from development by allowing flexibility in particular circumstances.*

As detailed above, the request to vary the development standard of Clause 4.3 - Height of Buildings is considered to be well founded and justified under the circumstances. It is considered appropriate in this instance to apply a degree of flexibility when applying the maximum height development standard applicable to the subject site. Moreover, it is considered that achieving a greater height in this instance will allow for the creation of a high quality development within the locality and in turn represents a design outcome that is suitable for the locality.

5) Recommendation

With considerations to the discussion above, the proposed variation to the Clause 4.3 *“height of buildings”* has satisfied the provisions of Clause 4.6 and is supported in this circumstance.

6.2 Section 4.15(1)(a)(ii) - Any Draft Environmental Planning Instrument

There are no draft Environmental Planning Instruments that apply to the site.

6.3 Section 4.15(1)(a)(iii) - Provisions of any Development Control Plan

The application has been assessed against the controls of the LDCP 2008, particularly Part 1 *General Controls for all Development*, and Part 3.7 *Residential Flat Buildings in the R4 Zone*.

The table below provides an assessment of the proposal against the relevant controls of the LDCP 2008.

LDCP 2008 Part 1: General Controls for All Development			
Development Control - Section	Required	Provided	Complies
2. Tree Preservation	Controls relating to the preservation of trees	Twelve (12) trees within the site and three (3) trees within the Council reserve on Bigge Street will be removed and replaced. One tree on the adjoining site is proposed to be retained.	Yes
3. Landscaping and Incorporation of Existing Trees	Controls relating to landscaping and the incorporation of existing trees.	As detailed in the Arborist Report all existing trees on site are proposed for removal to accommodate the building works of the development. The trees are located within the footprint of the proposed development and are not suitable to be considered for retention. A Lemon Scented Gum is located outside of the site, located on boundary of the adjoining property at 7 Goulburn Street. The tree is nominated as having a high retention value and high significance. The Arborist Report confirms this tree will be subject to minor encroachment (less than 10%) but includes a series of tree protection works which are recommended to be adhered to, to ensure this tree is retained and protected.	Yes

LDCP 2008 Part 1: General Controls for All Development			
Development Control - Section	Required	Provided	Complies
4. Bushland and Fauna Habitat Preservation	Controls relating to bushland and fauna habitat preservation	Not Applicable	N/A
5. Bush Fire Risk	Controls relating to development on bushfire prone land	Not Applicable	N/A
6. Water Cycle Management	Stormwater runoff shall be connected to Council's drainage system by gravity means. A stormwater drainage concept plan is to be submitted.	Drainage from the site is intended to connect directly to Council's drainage network. The existing drainage network is proposed to be extended from the downstream stormwater pit at the intersection of Bigge Street and Hume Highway. A kerb inlet pit and associated pipe is to be constructed in Bigge Street 50m upstream from the existing pit, in front of the development. Stormwater from the development site is to discharge directly to this pit. The inlet pit and associated pipes have been designed to merge with the surrounding environment and be visually unobtrusive. Stormwater will be captured by the proposed building by using a rainwater tank for reuse. Any overflow from the rainwater tank will be directed to an OSD tank. The OSD tank will also hold runoff from landscaped and hardstand areas and will be discharged to Council's drainage network.	Yes
7. Development Near a Watercourse	If any works are proposed near a water course, the Water Management Act 2000 may apply, and you may be required to seek controlled activity approval from the NSW Office of Water.	Not Applicable	N/A

LDCP 2008 Part 1: General Controls for All Development			
Development Control - Section	Required	Provided	Complies
8. Erosion and Sediment Control	Erosion and sediment control plan to be submitted.	Conditions of consent will be imposed to ensure that erosion and sediment control measures are implemented during the construction of the development.	Yes
9. Flooding Risk	Provisions relating to development on flood prone land.	Council's Flood Engineers have advised that the site is not affected by flood planning and therefore flood related development controls are not applicable.	Yes
10. Contaminated Land Risk	Provisions relating to development on contaminated land.	As discussed within this report, the site is suitable for development, subject to remediation should contaminated soil be found during construction.	Yes
11. Salinity Risk	Provisions relating to development on saline land.	The site is identified as having moderate potential for saline soils. Conditions relating to erosion and sediment control measures will be implemented to prevent further spread of potentially saline soils.	Yes
12. Acid Sulphate Soils	Provisions relating to development on acid sulphate soils	Not Applicable	N/A
13. Weeds	Provisions relating to sites containing noxious weeds.	Not Applicable	N/A
14. Demolition of Existing Development	Provisions relating to demolition works	The site is currently vacant of all structures and does not require further demolition. Waste generated from the excavation and construction of the building will be re-used where possible, with the remainder of the waste disposed of to appropriate facilities.	N/A
15. On Site Sewage Disposal	Provisions relating to OSMS.	OSMS is not proposed.	N/A
16. Aboriginal Archaeology	An initial investigation must be carried out to determine if the proposed development	The site is unlikely that it would contain Aboriginal Archaeology. If any Aboriginal relics/artefacts are uncovered during the course of any	TBC

LDCP 2008 Part 1: General Controls for All Development			
Development Control - Section	Required	Provided	Complies
	or activity occurs on land potentially containing an item of aboriginal archaeology.	construction works including excavation, work is to cease immediately.	
17. Heritage and Archaeological Sites	Provisions relating to heritage sites.	The site is not identified as a heritage item or within the immediate vicinity of a heritage item.	N/A
18. Notification of Applications	Provisions relating to the notification of applications.	The application was notified in accordance with the LDCP 2008. No submissions were received.	Yes
19. Used Clothing Bins	Provisions relating to used clothing bins.	The DA does not propose used clothing bins.	N/A
20. Car Parking and Access	Residential Development Car Parking Requirements: <ul style="list-style-type: none"> - 1 space per one bedroom; - 1.5 spaces per two bedroom units; - 2 spaces per three or more bedroom dwelling; - 1 space per 4 units or part thereof, for visitors - One service bay 	Car parking has been provided in accordance with the SEPP (Affordable Rental Housing) 2009.	N/A
21. Subdivision of Land and Buildings	Minimum Subdivision Lot Size: 1000m ²	Amalgamated Lot Size is greater than 1000m ² . No further subdivision is proposed.	Yes
22. and 23 Water Conservation and Energy Conservation	New dwellings are to demonstrate compliance with State Environmental Planning Policy – Building Sustainability Index (BASIX).	Conditions of consent will be imposed to ensure compliance with the BASIX commitments.	Yes
25. Waste Disposal and Re-use Facilities	Provisions relating to waste management during construction and on-going waste.	A Construction Waste Management Plan and an Operational Waste Management Plan have been prepared and submitted with the application. A waste storage area, comprising of a garbage holding room and a bulky goods room is provided at the	Yes

LDCP 2008 Part 1: General Controls for All Development			
Development Control - Section	Required	Provided	Complies
		Ground Level and is capable of containing the waste generated by the proposal. Residents will be supplied with a collection area within each unit where they can deposit garbage and collect recyclable material suitable for one day's storage. All waste generated by this development will be collected by Council with both garbage and recycling being collected on a twice weekly basis. A building manager/caretaker will be responsible for transporting the bins to and from the garbage holding room bins for collection at an area adjacent to the driveway, for ease of servicing. On collection days, Council's waste contractor will safely reverse into the driveway area off Bigge Street.	
26 Outdoor Advertising and Signage	Provisions relating to signage.	The DA does not propose any signage.	N/A
27. Social Impact Assessment	A social impact comment (SIC) shall be submitted for residential flat buildings greater than 200 units or affordable rental housing.	The proposal contains a total of 52 affordable housing units. A Social Impact Comment is required for the proposed development. This is provided within the SEE. The development will result in a positive social impact, as it will be providing 100% affordable housing among other social benefits.	Yes

LDCP 2008 Part 4: Development in the Liverpool City Centre:

Development Controls	Required	Provided	Complies
2 Controls for Building Form			
2.1 Building Form			
Specific Alignment and Street Setbacks	The required front setback is 4-4.5m	The proposed setback is 6.315m which generally aligns with the existing adjoining building setbacks	Yes

Street Frontage Height	Street Frontage height required between 15m-25m (5-7) storeys	<p>There is no predominant street frontage height along this part of Bigge Street, although the adjoining property to the south has a similar four storey street wall.</p> <p>The four-storey street frontage height is considered appropriate in the site's context. No fake building street walls are proposed as part of the development.</p>	Yes
Building Depth and Bulk	<p>1. The maximum floor plate sizes and depth of buildings are specified and illustrated in Figure 6 and Table 1.</p> <p>2. Notwithstanding the above, the component of a building above the maximum specified street frontage is not to have a building length in excess of 45m.</p> <p>3. Maximum floor plate sizes only apply above street frontage height levels. The proposed development is allowed a maximum GFA of 500m² per floor above the street frontage height.</p>	<p>The proposed development exhibits a street wall for 4 storeys with the 6 storeys above setback an additional 3 metres. This works to "break-down" the bulk and scale of the building, allowing the proposal to appear more human scale in massing when viewed from the street. The component of the proposed development above the specified street frontage does not have a street frontage building length greater than 45m. According to Table 1.</p> <p>Levels 3 to 10 (being those above the street frontage height), have GFA's ranging from 497m² to 239m², thereby complying with this control.</p>	Yes
Boundary Setbacks and Building Depth and Bulk	Note: For the purposes of this section, commercial uses means all non-residential buildings	The proposal is non-compliant with the required upper level setback of 12m to the	Yes, by merit

	<p>(including hotel accommodation, but not serviced apartments).</p> <p>1. The minimum building setbacks from the front, side and rear property boundaries are specified in Table 2 and illustrated generically in Figure 7.</p> <p>7. In exceptional circumstances where the required setback distances are not possible, the portion of a building over 45m in height may be considered on merit by the consent authority so long as the following minimum separation distances between tall buildings, or potential future tall buildings are adhered to: - 20m applies between commercial uses and - 28m between residential uses.</p>	<p>north and south (side setbacks). A 9m setback is provided above 25m, however, it is considered acceptable given the objectives of the DCP can be achieved.</p> <p>The objectives of the boundary setback controls seek to ensure an appropriate level of amenity for building occupants in terms of daylight, outlook, view sharing, ventilation, wind mitigation, and privacy is achieved.</p> <p>There are no detrimental impacts on adjoining dwellings and none anticipated for future occupants as there are minimal window openings orientated to the southern side boundary and the majority of windows orientated to the northern side boundary are associated with bedrooms rather than primary living spaces.</p> <p>It is therefore considered that the small breach to the setback control is acceptable.</p>	
2.3 Site Cover and Deep Soil Zones			
Maximum cover	<p>1. The maximum site cover for development is specified in the following table:</p> <p>All other zones = 50%</p>	<p>The site has an area of 1,757.8m². The site therefore has a maximum allowable site cover of 50 % or 878.9m². The ground</p>	<p>Yes, by merit</p>

	<p>2. Developments with a residential component in all zones, except the Commercial Core, must include a deep soil zone.</p> <p>3. The deep soil zone shall comprise no less than 15% of the total site area (or proportionate to the percentage of residential uses in a mixed-use development). It is to be provided preferably in one continuous block but otherwise with no dimension (width or length) less than 6m.</p> <p>4. Where non-residential development results in full site coverage and there is no capacity for water infiltration, the deep soil component must be provided on structure, in accordance with the provisions of Section 2.5. In such cases, compensatory stormwater management measures must be integrated within the development to minimise stormwater runoff.</p> <p>5. Where deep soil zones are provided, they must accommodate existing mature trees as well as allowing for the planting of trees/ shrubs that will grow to be mature plants.</p> <p>6. No structures, works or excavations that may restrict vegetation growth are permitted in this zone (including but not limited to car parking, hard paving, patios, decks and drying areas).</p>	<p>floor GFA is 508m², thereby complying with DCP requirements for site coverage.</p> <p>A deep soil zone of 208m², comprising 12% of the total site area, is provided to the rear of the development. The non-compliance of 3% is relatively minor. Furthermore, according to the ADG, a deep soil zone consisting of 7% (123.05m²) of the total site area (1757.8m²) and being of a minimum width of 6m is required. The proposed development therefore complies with the ADG provisions.</p>	
2.4 Landscape Design			
	<p>1. Landscaped areas are to be irrigated with recycled water.</p>	<p>A Landscape Plan has been prepared by Sydney Design Collective.</p>	<p>Yes</p>

	<p>2. Landscape species are to be selected in accordance with Council's schedule of Preferred Landscape Species.</p> <p>3. Commercial and retail developments are to incorporate planting into accessible outdoor spaces.</p> <p>4. Remnant vegetation must be maintained throughout the site wherever practicable.</p> <p>5. A long-term landscape concept plan must be provided for all landscaped areas, in particular the deep soil landscape zone. The plan must outline how landscaped areas are to be maintained for the life of the development. 6. Any new public spaces are to be designed so that at least 50% of the open space provided has a minimum of 3 hours of sunlight between 10am and 3pm on 21st June (Winter Solstice).</p>	<p>The proposed landscaping satisfies minimum performance standards and is both sustainable and appropriate to the site through the use of native vegetation.</p> <p>Landscaping provides natural amenity to the site and its surrounds and assists in promoting the usability of communal open space.</p> <p>A variety of native trees will be planted as a result of the proposed development, ensuring that the current level of canopy cover is maintained and enhanced.</p> <p>The new trees have been selected to ensure species diversity which enhances the urban character of the locality and to enhance biodiversity in the area</p>	
2.5 Planting on Structures			
Planting on Structures	<p>1. Areas with planting on structures are to be irrigated with recycled water.</p> <p>2. Design for optimum conditions for plant growth by:</p> <ul style="list-style-type: none"> -providing soil depth, soil volume and soil area appropriate to the size of the plants to be established, - providing appropriate soil conditions and irrigation methods, and 	<p>The proposed landscaped areas will be irrigated with recycled water.</p> <p>The landscape plan identifies the required conditions for plants and trees growth including and not limited to drainage requirements, soil depth, soil volume and</p>	Yes

	<ul style="list-style-type: none"> - providing appropriate drainage. - Design planters to support the appropriate soil depth and plant selection by: <ul style="list-style-type: none"> - ensuring planter proportions accommodate the largest volume of soil possible and soil depths to ensure tree growth, and providing square or rectangular planting areas rather than narrow linear areas. <p>3. Increase minimum soil depths in accordance with:</p> <ul style="list-style-type: none"> - the mix of plants in a planter for example where trees are planted in association with shrubs, groundcovers and grass, - the level of landscape management, particularly the frequency of irrigation, - anchorage requirements of large and medium trees, and soil type and quality. <p>4. Provide sufficient soil depth and area to allow for plant establishment and growth. The following minimum standards are recommended:</p> <ol style="list-style-type: none"> Large trees (over 8m high) minimum soil depth 1.3m, minimum soil volume 150m³ Medium trees (2 – 8m high), minimum soil depth 1m, minimum soil volume 35m³ Small trees (up to 2m high), minimum soil depth 0.8m, minimum soil volume 9m³ Shrubs and ground cover, minimum soil depth 0.5m, no minimum soil volume. 	soil area appropriate to the size of plants to be established.	
3. Amenity			
3.2 Active Street Frontages & Address			
	<p>Street Address</p> <p>1. Street address is defined as:</p> <ul style="list-style-type: none"> - a building that is not raised more than a weighted average of 700mm above street level, up to 	<p>The proposed development has oriented its main building entry and lobby towards the Bigge Street frontage.</p>	Yes

	<p>a maximum of 1.1m (refer to Section 3.3 Front Fences), and</p> <ul style="list-style-type: none"> - contains entries, lobbies, and habitable rooms with clear glazing overlooking the street, and - excludes car parking areas. <p>2. Street address is required on ground level of all areas identified in Figure 14.</p> <p>3. Residential developments are to provide a clear street address and direct pedestrian access off the primary street front, and allow for residents to overlook all surrounding streets.</p> <p>4. Provide multiple entrances for large developments including an entrance on each street frontage.</p> <p>5. Provide direct 'front door' access to ground floor residential units.</p> <p>6. Residential buildings are to provide not less than 65% of the lot width as street address</p>	<p>Horizontal and vertical design elements as well as various landscaping species have been implemented to further activate the existing street frontage.</p> <p>Pedestrian access to the site from Bigge Street is clearly delineated through paving. The windows of ground floor and upper level dwellings have been situated to enhance passive surveillance of the public domain on Bigge Street.</p>	
3.3 Front Fences			
	<p>1. Front fences include fences to the primary and secondary street frontages, and side boundary fences forward of the building alignment.</p> <p>2. Front fences are to be designed in accordance with Figures 14 and 15, and must not present a solid edge to the public domain greater than 1.3m above the footpath/public domain level (refer to Section 3.2 regarding Street Address).</p> <p>3. The use of varied materials is preferred. The use of sheet</p>	<p>The proposed development contains a fence in the front setback, which separates both the communal open space area and the private open space area for the ground floor unit facing Bigge Street, from the landscaped area located between the building and the street. This front fencing comprises a vertical, visually permeable steel fence and</p>	Yes

	metal is not permitted as a front fence material.	includes an integrated gate for residential access. The front fence acts to maintain visual and acoustic privacy for the residents.	
3.4 Safety and Security			
	<p>1. Address 'Safer-by-Design' principles to the design of public and private domain, and in all developments (including the NSW Police 'Safer by Design' crime prevention through environmental design (CPTED) principles).</p> <p>2. Ensure that the building design allows for passive surveillance of public and communal spaces, accessways, entries and driveways.</p> <p>3. Avoid creating blind corners and dark alcoves that provide concealment opportunities in pathways, stairwells, hallways and car parks.</p> <p>4. Maximise the number of residential 'front door' entries at ground level.</p> <p>5. Provide entrances which are in visually prominent positions and which are easily identifiable, with visible numbering.</p> <p>6. Clearly define the development boundary to strengthen the transition between public, semi-private and private space. This can be actual or symbolic and can include landscaping, fences, change in paving material, etc.</p> <p>7. Provide adequate lighting of all pedestrian access ways, parking areas and building entries.</p> <p>8. Provide clear lines of sight and well-lit routes throughout the development.</p> <p>9. Where a pedestrian pathway is provided from the street, allow</p>	<p>The proposal ensures a high level of security for residents and visitors. The entrance to the building is oriented towards Bigge Street and is easily visible from the public domain. The building lobbies on each level are compact, with clear lines of site from all levels provided to both the communal areas on Bigge Street as well as those within the development itself, thereby encouraging passive surveillance. Clear design features, lighting and materials have been utilised to distinguish public, semi-private and private domains. Access to and from private areas is restricted and controlled to allow only residents and visitors.</p>	Yes

	for casual surveillance of the pathway.		
3.5 Awnings			
	<p>1. Street frontage awnings are to be provided for all new developments as indicated in Figure 16.</p> <p>2. Awning dimensions should generally be:</p> <ul style="list-style-type: none"> - horizontal in form, - minimum 2.4m deep (dependent on footpath width), - minimum soffit height of 3.2m and maximum of 4m, - steps for design articulation or to accommodate sloping streets are to be integral with the building design and should not exceed 700mm, - low profile, with slim vertical fascias or eaves (generally not to exceed 300mm height), and - 1.2m setback from kerb to allow for clearance of street furniture, trees, and other public amenity elements. - In consideration of growth pattern of mature trees <p>3. Awning design must match building facades, be complementary to those of adjoining buildings and maintain continuity.</p> <p>4. Wrap awnings around corners for a minimum 6m from where a building is sited on a street corner.</p> <p>5. Vertical canvas drop blinds may be used along the outer edge of awnings along north-south streets. These blinds must not carry advertising or signage.</p> <p>6. Provide under awning lighting to facilitate night use and to improve public safety recessed into the soffit of the awning or wall mounted onto the building.</p> <p>7. Any under awning sign is to maintain a minimum clearance of 2.8m from the level of the pavement.</p>	<p>The proposal requires awnings for the purpose of weather protection to entrances. The building entrance for the development is recessed within the envelope of the building, thereby ensuring that it is located undercover and is protected from the elements. The proposed building entry is also similar to those of surrounding development, particularly the residential flat buildings located adjacent to the site at 1-3 Bigge Street and 8-10 Bigge Street. The proposed development thereby complies with the intent of this control.</p>	Yes

	8. All residential buildings are to be provided with awnings or other weather protection at their main entrance area.		
3.6 Vehicle Footpath Crossings			
Location of Vehicle Access	<p>1. No additional vehicle entry points will be permitted into the parking or service areas of development along those streets identified in Figure 18 (edged in blue).</p> <p>2. In all other areas, one vehicle access point only (including the access for service vehicles and parking for non-residential uses within mixed use developments) will be generally permitted.</p> <p>3. Where practicable, vehicle access is to be from lanes and minor streets rather than primary street fronts or streets with high pedestrian priority routes identified in Figure 18 (marked yellow).</p> <p>4. Where practicable, adjoining buildings are to share or amalgamate vehicle access points. Internal on-site signal equipment is to be used to allow shared access. Where appropriate, new buildings should provide vehicle access points so that they are capable of shared access at a later date.</p> <p>5. Vehicle access may not be required or may be denied to some heritage buildings.</p>	There are no restrictions on vehicular access for the site. The design of carparking and vehicular access to the development responds to the layout of the site and its surrounds. Vehicular access from Bigge Street to the basement parking level is provided via a single driveway situated near the southern boundary of the site.	Yes
Design of Vehicle Access	<p>1. Wherever practicable, vehicle access is to be a single lane crossing with a maximum width of 2.7m over the footpath, and perpendicular to the kerb alignment. In exceptional circumstances, a double lane crossing with a maximum width of 6m may be permitted for safety reasons (refer to Figure 18).</p> <p>2. Vehicle access ramps parallel to the street frontage will</p>	As mentioned above, vehicular access from Bigge Street to the Basement parking level is provided via a single driveway situated near the southern boundary of the site. The proposed vehicular access ramp is not provided parallel to Bigge Street, and is	Yes

	<p>not be permitted. 3. Ensure vehicle entry points are integrated into building design. 4. Doors to vehicle access points are to be roller shutters or tilting doors set back from the building facade. 5. Vehicle entries are to have high quality finishes to walls and ceilings as well as high standard detailing. No service ducts or pipes are to be visible from the street.</p>	<p>instead situated perpendicular to the kerb alignment. The design of the basement car parking level enables vehicles to ingress and egress in a forward direction. Pedestrian and vehicular access into the site is clearly delineated and are provided separate from each other.</p>	
3.8 Building Exteriors			
	<p>1. Adjoining buildings (particularly heritage buildings) are to be considered in the design of new buildings in terms of:</p> <ul style="list-style-type: none"> - appropriate alignment and street frontage heights, - setbacks above street frontage heights, - appropriate materials and finishes selection, - facade proportions including horizontal or vertical emphasis, and - the provision of enclosed corners at street intersections. <p>2. Balconies and terraces should be provided, particularly where buildings overlook public spaces. Gardens on the top of setback areas of buildings are encouraged.</p> <p>3. Articulate façades so that they address the street and add visual interest. Buildings are to be articulated to differentiate between the base (street frontage height), middle and top in design. 4. Blank walls in general that address street frontages or public open space are discouraged. Where they are unavoidable building elements or landscaping must be used to break up large expanses of walls. In some cases an anti-</p>	<p>The proposed residential flat building integrates with the existing street alignment, frontage height and materials of surrounding developments. The building façade to Bigge Street is modulated and articulated through horizontal and vertical design elements to reduce the appearance of building bulk and to enhance positive elements of the building's architecture.</p> <p>A variety of high quality materials and finishes have been incorporated into the design of the development.</p>	Yes

	<p>graffiti coating will need to be applied to the wall to a height of 2 metres.</p> <p>5. Finishes with high maintenance costs, those susceptible to degradation due to a corrosive environment or finishes that result in unacceptable amenity impacts, such as reflective glass, are to be avoided.</p> <p>6. To assist articulation and visual interest, expanses of any single material is to be avoided.</p> <p>7. Limit sections of opaque or blank walls greater than 4m in length along the ground floor to a maximum of 30% of the building frontage.</p> <p>8. Maximise glazing for retail uses, but break glazing into sections to avoid large expanses of glass</p> <p>9. Highly reflective finishes and curtain wall glazing are not permitted above ground floor level (refer to Section 5.3).</p>		
4.4 Traffic and Access			
	<p>1. Main building entry points should be clearly visible from primary street frontages and enhanced as appropriate with awnings, building signage or high quality architectural features that improve clarity of building address and contribute to visitor and occupant amenity.</p> <p>2. The design of facilities (including car parking requirements) for disabled persons must comply with the relevant Australian Standard (AS 1428 Pt 1 and 2, or as amended) and the Disability Discrimination Act 1992 (as amended).</p> <p>3. Barrier free access is to be provided to not less than 20% of dwellings in each development and associated common areas.</p>	<p>Entry to the building is clearly defined through articulated materials and is easily accessible from Bigge Street.</p> <p>The pedestrian access and entryway is located separate from the driveway, which is situated towards the southern end of the site's frontage to Bigge Street so as to maximise pedestrian safety. Pedestrian access to the site is provided from Bigge Street via a paved pathway to the main building entrance of the residential flat building.</p> <p>An Access Report has</p>	Yes

	<p>4. The development must provide at least one main pedestrian entrance with convenient barrier free access in all developments to at least the ground floor.</p> <p>5. The development must provide accessible internal access, linking to public stress and building entry points.</p> <p>6. Pedestrian access ways, entry paths and lobbies must use durable materials commensurate with the standard of the adjoining public domain (street) with appropriate slip resistant materials, tactile surfaces and contrasting colours.</p>	<p>been prepared by Morris Goding Access Consulting. The report finds that there is an acceptable path of travel to the main entrance of the building lobby area, providing ease of access to all dwellings. The design of the development also complies with the relevant Australian Standards.</p>	
4.2 Vehicular Driveways and Manoeuvring Areas			
	<p>1. Driveways should be: - provided from lanes and secondary streets rather than the primary street, wherever practical, - located taking into account any services within the road reserve, such as power poles, drainage inlet pits and existing street trees, - located a minimum of 10m from the perpendicular of any intersection of any two roads, and - Located to minimise noise and amenity impacts on adjacent residential development.</p> <p>2. Vehicle access is to be integrated into the building design so as to be visually recessive.</p> <p>3. All vehicles must be able to enter and leave the site in a forward direction without the need to make more than a three point turn.</p> <p>4. Design of driveway crossings must be in accordance with Council's standard Vehicle Entrance Designs, with any works within the footpath and</p>	<p>Vehicular access to the basement parking level within the proposed residential flat building is provided via a driveway situated to the southern side of the building. The design of the driveway and internal circulation enables vehicles to ingress and egress in a forward direction, without the need for a three point turn. The Traffic and Parking Assessment Report prepared by Varga Traffic Planning Pty Ltd demonstrates that the design of the driveway is in accordance with all relevant Australian Standards.</p>	Yes

	<p>road reserve subject to a Section 138 Roads Act approval.</p> <p>5. Driveway widths must comply with the relevant Australian Standards.</p> <p>6. Car space dimensions must comply with Australian Standard 2890.1.</p> <p>7. Driveway grades, vehicular ramp width/ grades and passing bays must be in accordance with the relevant Australian Standard, (AS 2890.1).</p> <p>8. Access ways to underground parking should be sited to minimise noise impacts on adjacent habitable rooms, particularly bedrooms.</p>		
4.3 On Site Parking			
	<p>General (All Development) 1. Except as separately provided for in the Liverpool LEP 2008, on site vehicle and bicycle parking is to be provided in accordance with Table 3.</p> <p>-1 Space per two studio apartment</p> <p>-1 space per two bedroom or three bedroom</p> <p>-1 space per 10 units for visitors</p> <p>-1 motorcycle per 20 spaces</p> <p>-2% disabled person parking</p> <p>1 bycle per 200sqm GFA</p> <p>Notes: ▪ Required car parking should be provided on site with the balance of any required car parking spaces subject to a contribution under an adopted Contributions Plan, or as set out by the terms of a Voluntary Planning Agreement. ▪ Required parking for service and delivery vehicles must be provided onsite unless Council is satisfied that adequate dedicated on-street 'loading zones' space(s) are available in the vicinity.</p>	<p>The proposed development includes the provision of 52 affordable housing units with a total GFA of 3,908m². According to provisions of this control, the proposed development requires 18 bicycle parking spaces, 1 motorcycle space and 52 car parking spaces. However, the application of the SEPP (Affordable Rental Housing) 2009 requires a total 24 car parking spaces. A total of 24 car parking spaces (inclusive of 6 disabled parking spaces), 18 bicycle spaces and 2 motorcycle spaces are to be provided as part of this development. Therefore, the proposal complies with the provisions of the</p>	Yes

	<p>2. Car parking and associated internal manoeuvring areas provided over and beyond that required by this Part is to be calculated towards gross floor area.</p> <p>3. Car parking above ground level is to have a minimum floor to ceiling height of 2.8m so it can be adapted to another use in the future.</p> <p>4. Onsite parking must meet the relevant Australian Standard (AS 2890.1 2004) – Parking Facilities or as amended.</p> <p>5. To accommodate people with disabilities provide a minimum of 2% of the required parking spaces, or minimum 1 space per development (whichever is the greater) as an appropriately designated and signed disabled parking space.</p> <p>6. Bicycle parking is to be in secure and accessible locations with weather protection.</p> <p>7. Required parking for service and delivery vehicles must be provided on site unless Council is satisfied that adequate dedicated on street 'loading zone' space(s) are available in the vicinity.</p> <p>Developments in all other zones</p> <p>9. Onsite parking for residential flat buildings (or residential flat building component of a mixed use development) is to be wholly in basement parking unless Council is satisfied that unique site conditions prevent achieving all parking in basements. Council may require provision of a supporting geo-technical report or other supporting documentation, prepared by an appropriately qualified professional as information to</p>	<p>Affordable Housing SEPP.</p>	
--	--	---------------------------------	--

	<p>accompany a development application to Council.</p> <p>10. The impact of any on grade car parking must be minimised by:</p> <ul style="list-style-type: none"> - Locating parking on the side or rear of the lot, away from the street frontage - Provision of fencing or landscaping to screen the view of cars from adjacent streets and buildings - Incorporating car parking into landscape design of the site (such as plantings between parking bays to improve views, selection of paving material and screening from communal and open space areas) <p>11. Natural ventilation should be provide to underground parking areas, where possible, with ventilation grills and structures:</p> <ul style="list-style-type: none"> - Integrated into the overall façade and landscape design of the development - Not located on the primary street façade and - Oriented away from windows of habitable rooms and private open space areas <p>Bicycle Lockers and shower facilities</p> <p>12. For commercial and retail development providing employment for 20 persons or more, provide adequate change and shower facilities for cyclists. Facilities should be located conveniently close to bike storage areas.</p>		
5 Environmental Management			
5.1 Energy Efficiency and Conservation			
Residential	<p>Residential</p> <p>1. New dwellings, including dwellings within a mixed use building and serviced apartments intended or capable of being strata titled, are to demonstrate compliance with State Environmental Planning</p>	A BASIX Report and Certificate has been prepared by WGE.	Yes

	Policy – Building Sustainability Index (BASIX). A complying BASIX report is to be submitted with all development applications containing residential activities.		
5.2 Water Conservation			
	Residential 1. New dwellings, including a residential component within a mixed use building and serviced apartments intended or capable of being strata titled, are to demonstrate compliance	A BASIX Report and Certificate has been prepared by WGE.	Yes
5.3 Reflectivity			
	1. New buildings and facades should not result in glare that causes discomfort or threatens safety of pedestrians or drivers. 2. Visible light reflectivity from building materials used on the facades of new buildings should not exceed 20%. 3. Subject to the extent and nature of glazing and reflective materials used, a Reflectivity Report that analyses potential solar glare from the proposed development on pedestrians or motorists may be required.	The materials and finishes for the proposed development have been designed to reduce glare. The incorporation of spandrel panelling within the front façade of the building minimises the appearance of glass.	Yes
5.4 Wind Mitigation			
	1. To ensure public safety and comfort, the following maximum wind criteria are to be met by new buildings: - 10m/second in retail streets, - 13m/second along major pedestrian streets, parks and public places, and - 16m/second in all other streets. 2. Site design for tall buildings (towers) should: - set tower buildings back from lower structures built at the street frontage to protect pedestrians from strong wind downdrafts at the base of the tower, - ensure that tower buildings are well spaced from each other to allow breezes to penetrate city centre,	Noted. The proposed development has a four-storey podium which sets back the upper levels by approximately 3-6 metres, thereby mitigating the potential adverse wind effects that may be generated by the development. Habitable rooms within the development are located below 35 metres and as such the DA does not require a Wind Effects Report	Yes

5.5 Noise			
	<p>1. An acoustic report is required for all noise affected locations, as identified in Figure 25. This report is to demonstrate that appropriate noise attenuation and barrier planning is to be implemented. 2. Sites adjacent to noise sources identified in Figure 25 are to be designed in a manner that any residential development is shielded from the noise source by virtue of the location and orientation of built form on the site. Depending on the type and scale of development, acoustic assessment may be required for sites outside the noise source 3 areas. Fig. 5.1 3. An 8m setback is to be provided to any residential component of development located fronting onto Terminus Street. 4. An 8m setback is to be provided to any habitable building located adjacent to the Hume Highway</p>	<p>An Acoustic Impact Report prepared by Acoustic Logic is provided. The acoustic report finds that the noise impacts of the proposed development will comply with the requirements of this DCP, State Environmental Planning Policy (Infrastructure) 2007 and the relevant Australian Standards. Noise attenuation measures have been incorporated within the building design to minimise any acoustic impacts from the Hume Highway.</p>	<p>Yes</p>
5.6 Waste			
	<p>3. Provision must be made for the following waste generation General – 80lts/week/dw Recycling – 80lts/week/dw Green Waste - communal</p> <p>5. In a development of more than six dwellings or where the topography, or distance to the street makes access difficult for individual occupants, a collection and storage area is required. The storage area must be located in a position which is: - Not visible from the street - Easily accessible to dwelling occupants - Accessible by collection vehicles (or adequately managed by the body corporate to permit relocation of bins to an approved</p>	<p>An Operational Waste Management Plan has been prepared by Elephants Foot for this application.</p> <p>A waste storage area, comprising of a garbage holding room and a bulky goods room is provided at within the Ground Level of the building and is capable of containing the waste generated by the proposal. Residents will be supplied with a collection area within each unit where they can deposit garbage and collect recyclable</p>	<p>Yes</p>

	<p>collection point), - Has water and drainage facilities for cleaning and maintenance; and - Does not immediately adjoin private open space, windows or clothes drying areas</p> <p>6. Wherever a rear lane is present and waste removal is available, the rear lane is to be utilised for the removal of waste.</p> <p>7. Subject to Council collection policy, common garbage storage areas must be sized to either accommodate the number of individual bins required or to accommodate sufficient larger bins with the following minimum dimensions: 8. The size and number of the waste bins shall be determined having regard to the need for either on-site access by collection vehicles or the requirement for bins to be wheeled to the street for collection by a contractor. If transferred to the street for collection, the body corporate or a caretaker must be responsible for the movement of bins to their collection point.</p>	<p>material suitable for one day's storage. All waste generated by this development will be collected by Council with both garbage and recycling being collected on a twice weekly basis. A building manager/caretaker will be responsible for transporting the bins to and from the garbage holding room bins for collection at an area adjacent to the driveway, for ease of servicing.</p>	
6. Controls for Residential Development			
6.1 Housing Choice and Mix			
	<p>(a) In addition to the provisions for apartment mix as per Part 3 of the Residential Flat Design Code, the following additional controls apply. (b)</p> <p>1. To achieve a mix of living styles, sizes and layouts within each residential development, comply with the following mix and size: - studio and one bedroom units must not be less than 10% of the total mix of units within each development, - three or more bedroom units must not be less than 10% of the total mix of units within each development, and,</p>	<p>The proposed development provides a housing mix of one and two bedroom units to accommodate a variety of residents. 29 one bedroom units (56%) and 23 two bedroom units (44%) are provided within the development. 6 apartments have been designed as adaptable units and make up 12% of the development. Where possible, these dwellings have been</p>	Yes

	<p>2. For smaller developments (less than six dwellings) achieve a mix appropriate to the locality.</p> <p>3. For development built by (or on behalf of) the Department of Housing, an alternative mix of unit types may be approved, subject to housing needs being demonstrated by the Department</p> <p>4. For residential flat buildings and multi-unit housing, 10% of all dwellings (or at least one dwelling – whichever is greater) must be designed to be capable of adaptation for disabled or elderly residents. Dwellings must be designed in accordance with the Australian Adaptable Housing Standard (AS 4299-1995), which includes “pre-adaptation” design details to ensure visitability is achieved.</p> <p>5. Where possible, adaptable dwellings shall be located on the ground floor, for ease of access. Dwellings located above the ground level of a building may only be provided as adaptable dwellings where lift access is available within the building. The lift access must provide access from the basement to allow access for people with disabilities. (g) 6. The development application must be accompanied by certification from an accredited Access Consultant confirming that the adaptable dwellings are capable of being modified, when required by the occupant, to comply with the Australian Adaptable Housing Standard (AS 4299-1995). (h) 7. Car parking and garages allocated to adaptable dwellings must comply with the requirements of the relevant Australian Standard for disabled parking spaces</p>	<p>located on the Ground floor and those that aren't have been located nearby lift access.</p>	
--	---	--	--

The above assessment has found that the development is generally compliant with the LDCP 2008 and is satisfactory.

6.4 Section 4.15(1)(a)(iiia) - Any Planning Agreement or any Draft Planning Agreement

No planning agreement relates to the site or proposed development.\

6.5 Section 4.15(1)(a)(iv) – The Regulations

The Environmental Planning and Assessment Regulations 2000 requires the consent authority to consider the provisions of the National Construction Code (NCC). If approved, appropriate conditions of consent will be imposed requiring compliance with the NCC.

6.6 Section 4.15(1)(b) – the likely impacts of the development

(a) Natural Environment

The impacts of the development on the natural environment have been assessed and the development is considered to be acceptable and unlikely to cause any adverse impact to the natural environment. The temporary removal of vegetation will be replaced trees and shrubs in new landscaping for the site. The retention and utilization of the large Lemon Scented Gum tree to the east adds to the unique landscape character to the entire development and adjoining properties.

Construction of the building will include excavation but good separation of 6m from adjoining boundaries is proposed which should provide a buffer to established development.

A Geotechnical Report has accompanied the DA which concludes that site is suitable for the proposed works.

(b) Built Environment

The proposed bulk and scale are designed to comply with the standards and guidance offered within the applicable planning framework. The design has been able to mitigate potential impacts with adjoining properties while at the same time ensuring that internal amenity for future residents is prioritised and provided to a high standard. As such, the proposed bulk and scale of the development represents a desirable and meritorious planning outcome for the site.

The impacts of the development on the built environment have been assessed and as the proposal represents the desired character for development in the R4 zone, is considered to be acceptable.

(c) Social Impacts

The development is considered beneficial from a social aspect as it will be providing 100% of the dwellings within the development as affordable housing. Further to this, the applicant is attempting to increase housing variety in the locality by providing a diverse unit mix.

(d) Economic Impacts

The short term positive economic impacts development that result from construction spending and employment opportunities generated during the construction phase are generally

recognised. Other, more enduring impacts should come as the local population increases and use local shopping and services.

6.7 Section 4.15(1)(c) – the suitability of the site for the development

The proposed development has been designed in line with the applicable planning controls which describe the desired future character of the site and surrounding locality. The proposed development is a permitted use and has a bulk, scale and appearance which also takes account of the site attributes and constraints. The proposed development is therefore considered suitable for the site.

6.8 Section 4.15(1)(d) – any submissions made in accordance with the Act or the regulations

(a) Internal Referrals

The following comments have been received from Council's Internal Departments:

Internal Department	Response
Natural Environment & Landscaping	No objection, subject to conditions
Land Development Engineering	No objection, subject to conditions
Traffic Engineering	No objection, subject to conditions
Waste Management	No objection, subject to conditions
Landscape	No objection
Environmental Health	No objection, subject to conditions
Flooding Engineers	No flooding impact on the site

(b) External Referrals

The following comments have been received from External agencies:

External Department	Status and Comments
Sydney Water	Reviewed the application and determined that this development does not require assessment by Sydney Water at this stage.
Endeavour Energy	No objection
NSW Police	No response received

(c) Community Consultation

The DA was notified in accordance with LDCP 2008 for a period of 14 days from 27 November to 11 December 2019. No submissions were received during the notification period.

6.9 Section 4.15(1)(e) – The Public Interest

The proposed development is consistent with the zoning of the land and would represent a quality development for the area by developing a vacant land. The development will provide additional housing opportunities in proximity to public transport, local shopping, services and employment opportunities. It will also add to the availability of affordable rental housing in the locality, thereby providing an important social benefit.

7 SECTION 7.12 CONTRIBUTIONS

The Liverpool Contributions Plan 2018 is applicable to the proposed development. Accordingly, the payable Section 7.11 Contribution fee for the development proposed is **\$447,070**, subject to the Consumer Price Index (CPI) increases applicable at the time of payment.

8 CONCLUSION

In conclusion, the following is noted:

- The subject DA has been assessed having regard to the matters of consideration pursuant to Section 4.15 of the Environmental Planning and Assessment Act 1979 and is considered satisfactory.
- The proposal is consistent with the desired character for the area.
- The proposal provides an appropriate response to the context of the site and satisfies the SEPP 65 design principles and the requirements of the ADG. The scale and built form are consistent with the desired character of the area envisaged under the LLEP 2008 and LDCP 2008. There are variations proposed to the height and building separation, however these are considered acceptable on merit.
- The proposal has undergone an extensive design review process and has satisfied the applicable objectives and provisions of Liverpool LEP 2008 including the provisions of Clause 7.5 relating to design excellence.
- The development will be well located in relation to transport, employment, shopping, business and community services, as well as recreation facilities. It will deliver an efficient use of the site with well-designed high amenity dwellings and facilities.
- The development will generate a social benefit for the community, given the provision of affordable rental housing.

9 RECOMMENDATION

That DA-639/2020 for the construction of an 11 storey residential flat building containing 52 apartments comprising of a mix of 1 bedroom and 2 bedroom units above 1 level of basement parking and the removal of all vegetation on the site and associated landscaping and civil works, be approved.

10 ATTACHMENTS

- 1) Architectural plans, demolition plan & landscape plans
- 2) Survey plan and Stormwater Concept Plans
- 3) Recommended conditions of consent

- 4) Statement of environmental effects
- 5) Clause 4.6 variation written justification to height
- 6) SEPP 65 Design Verification Statement
- 7) Acoustic Assessment Report
- 8) Arborist Report
- 9) Access Report
- 10) Traffic Report
- 11) Geotechnical Assessment report
- 12) Waste management plan
- 13) Contamination report
- 14) Detailed Site Investigation
- 15) BASIX certificate and house energy rating
- 16) Design excellence panel comments
- 17) SWCPP – Record of Briefing